

# Southeast

**DRAFT November 2007 - Work in Progress**

# Corridor-specific Report C

**Phase II and III**  
City of Houston

November, 2007

The **Planning** Partnership  
in collaboration with:

Asakura Robinson Company

• Gunda Corporation

• Cushman & Wakefield LePage

• Working Partner





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# Introduction

The Southeast Corridor has a number of physical characteristics in common with the North and East Corridors, however it is distinct in a number of ways. The Corridor is the home to major institutions that serve the entire City of Houston. In addition, this Corridor has a direct link to Downtown and Main Street. As the Corridor approaches the downtown along Rusk Street and Capital Street, the blocks are smaller within a grid pattern of streets. The downtown segment of this line was the home to industrial uses resulting in easily developed parcels in proximity to the core of Houston.

The Corridor passes close to the universities on Scott Street. Small lots characterize the street with sparse development between Highway 45 to Elgin Street. This portion of the Corridor can easily be redeveloped over time with infill mixed use development at a small scale, as illustrated in the demonstration plan for this area. The advantage of this condition is that the redevelopment of the Transit Street will be of a scale and nature that it will be contained to the street's edge and, by its nature, protect the adjacent low-density residential to the west from wholesale redevelopment.

South of the University of Houston at Martin Luther King Boulevard's intersection with Old Spanish Trail, as well as at the Palm Center, there are opportunities to create new development that will be of benefit not only to the surrounding community but also to the Transit System. Both of these locations are at stations and are illustrated in the demonstration plans.

The Corridor report will develop a strategy for encouraging the forms of development that will be supportive of transit as well as creating pedestrian scaled streets that lead from the surrounding neighborhoods to the Transit Street. The report will also suggest that most development will occur within a five-minute walk of the stations. This will result in large portions of the Corridor that will not develop in the short term. These have been described as stable neighborhoods and, because of their distance from the stations, they will be protected from redevelopment. In addition, the Southeast Corridor has a number of historic buildings and neighborhoods that need to be enhanced as redevelopment occurs. The advent of transit in this corridor should be viewed as an opportunity to strengthen its historic assets.

An approach to infill development and the attendant ordinance controls and urban design guidelines advance the concept that different forms of development should be designed to respect the adjacent neighborhoods.

# 1

## Context/Background Analysis

This chapter provides the context and background for the Southeast Corridor.

### C1.1

## Southeast Urban Corridor Study Area

The Southeast Urban Corridor starts in the downtown, moving east along Texas Avenue and Capitol Street. The Southeast Corridor continues south down Scott Street to the University of Houston campus. Beyond the University, the Southeast Corridor briefly shifts east down Wheeler Street before moving south down Martin Luther King Jr. Boulevard. The Southeast Corridor terminates at the Palm Center east of Martin Luther King Jr. Boulevard on Griggs Road.

The Southeast Corridor is approximately 5.5 miles long. The boundaries of the Southeast Urban Corridor Study Area – measured at a ¼ mile on either side of the proposed transit line – are shown on the adjacent map.



Streetscape on Capitol looking west toward Downtown



University of Houston residences on the south side of Wheeler

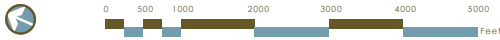


Martin Luther King Jr. Blvd. looking south toward Old Spanish Trail



Urban Corridor Study Area Southeast

- Southeast Transit Street
- Connecting Transit Street
- Corridor Study Area
- 5 Minute Walking Distance to Station







Industrial use on Rusk, looking west toward Downtown



Commercial establishment along Scott, south of Clay



View of sidewalk and vacant site, south of IH 45

## C1.2

### Context of the Southeast

#### C1.2.1

#### Land Use


Part of this Urban Corridor Planning study is to understand the common and unique characters of each Urban Corridor. Two elements that define the area are the land uses as well as the size and scale of buildings in the study area.

The map on the opposite page illustrates the range of existing land uses along the Southeast Urban Corridor. The area is composed of industrial and employment uses, single and multi-family residential uses, retail and service commercial uses, parks and open space as well as two major university campuses (institutional) with ancillary uses.





New townhouse development at Bastrop, between Rusk and St. Charles


Existing Land Uses Southeast


- 


 Southeast Transit Street
- 


 Connecting Transit Street
- 


 Single Family Residential
- 

 Multi Family Residential
- 

 Commercial
- 


 Office
- 

 Industrial
- 

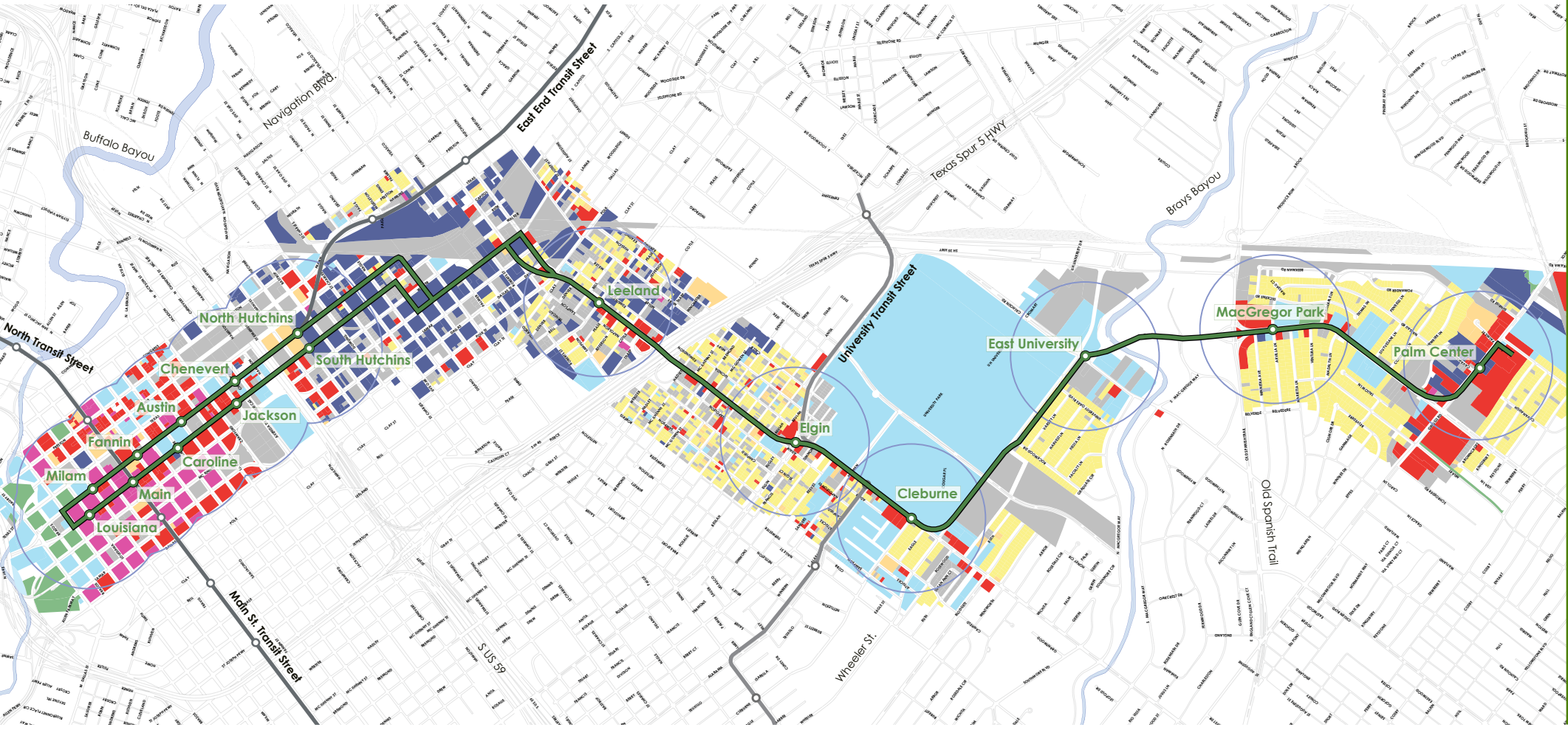
 Public/Institutional
- 

 Transportation/Utility
- 

 Park/Open Spaces
- 

 Undeveloped
- 

 Open Water





Small building footprints along Scott, north of IH 45



Medium sized building fronting along Griggs Road, west of Cavanaugh



New residential development on Griggs Road, east of Beekman Road

## C1.2.2 Building Footprint

The map on the facing page illustrates the size and scale of buildings found in the Southeast Corridor. All existing buildings have been shaded to help create a picture of the pattern created by different buildings, streets and open space - or the area's urban fabric.

The typical small downtown block dimensions of 250 by 250 feet extend from the northwest edge of the Southeast Corridor along Scott Street to Elgin Avenue. North of the I-45, the building footprints generally reveal half block and full block developments, consistent with employment and new higher density residential developments. South of the I-45, the pattern of building footprints reveal the prominence of single detached homes and small and medium-scale commercial buildings along the frontage of the Transit Street. As the Corridor continues south down Martin Luther King Jr. Boulevard, the block dimensions shift to a rectangular shape, with building footprints illustrating the continued mix of low density residential neighbourhoods and commercial buildings fronting along the Transit Street.





Park	Acquired Acres		Park Class
Market Square Park	1964	1.43	Plaza/Square
Old City Hall Clock Plaza	1995	0.01	CBD Non-Park Sites
Wortham Center-Fish Plaza	1987	0.01	CBD Non-Park Sites
Sesquicentennial Park	1988	4	Plaza/Square
Buffalo Bayou/Tinsley Park	1981	124.1	Linear
Jones Hall Public Plaza	1966	0.01	CBD Non-Park Sites
Jones Plaza	1964	1.43	Plaza/Square
Sam Houston Park	1899	19.7	Cultural/Historical
City Hall Annex Plaza	1960	0.01	CBD Non-Park Sites
City Hall Plaza	1939	0.01	CBD Non-Park Sites
Tranquility Park	1979	4.3	Plaza/Square
Hermann Square	1913	1.43	Plaza/Square
Root Memorial Square Park	1925	1.43	Plaza/Square
Minute Maid Park	1999	28.97	CBD Non-Park Sites
Settegast Park	1911	4.1	Community
Leroy (Moses) Park	1969	0.78	Pocket
Malone (Zurrie M.) Park	1973	0.69	Pocket
Diez Street Park	1993	9.37	Community
MacGregor Park	1925	82.79	Regional
MacGregor Parkway	1930	100	Linear
Beekman Street Park	2004	0.36	Pocket

**Target Acquisition Area/Parks**  
Buffalo Bayou Parkway/Trails  
Brays Bayou Parkway/Trails  
Potential pocket park, Tuam at Scott

**Other Park Projects of Note**  
Discovery Green Park-Under Construction, 11.78 Acres  
Proposed Palm Center Park (Beekman Park expansion)  
Potential soccer stadium  
Potential open space enhancements at I-45 and US-59

C1.2.3 Pedestrian Realm/Mobility Inventory

Parks

The Southeast Corridor provides public access to many CBD open space/park/plaza areas including the historical Sam Houston Park. Also located within the Corridor is Discovery Green, a Metro level park currently under construction adjacent to the George R. Brown Convention Center.

The 82.79 acre Macgregor Park straddles the proposed transit street along Martin Luther King Blvd. near the University (U of H) of Houston and Texas Southern University (BU) campuses.

The Southeast Corridor enjoys access to Buffalo Bayou and Brays Bayou linear open space systems. These urban Bayous provide canoeing, fishing, hiking and biking with access to densely vegetated areas.

Many City of Houston Community Center Parks offer After School Enrichment Programs, Summer Enrichment Programs, Summer Food Service Programs, Teen Recreation Programs, Summer Teen Camps, Adult Recreation Programs and Senior Recreation Programs. Community Center Parks and other community facilities in the vicinity of the Southeast Corridor include:

- ☐ Emancipation Community Center
- ☐ MacGregor Community Center
- ☐ Settegast Community Center
- ☐ Third Ward Multi-Service Center
- ☐ YMCA at Palm Center

In general, sidewalks providing access to parks and community facilities within the Southeast Corridor are in need of maintenance and repair. Sidewalk widths, generally 4 feet, are inadequate to provide for current and anticipated pedestrian traffic. Exceptions to poor sidewalk conditions occur in many parts of the CBD and UofH/TSU areas.

An Almeda/OST TIRZ sponsored sidewalk project along Old Spanish Trail and Griggs Rd. is currently under construction within the corridor area.

Publicly Accessible Open Space

Other park-like areas of non-city ownership often allow public access. The University of Houston and Texas Southern University provide numerous park-like and plaza open spaces serving both students, faculty and the public.

Sidewalks

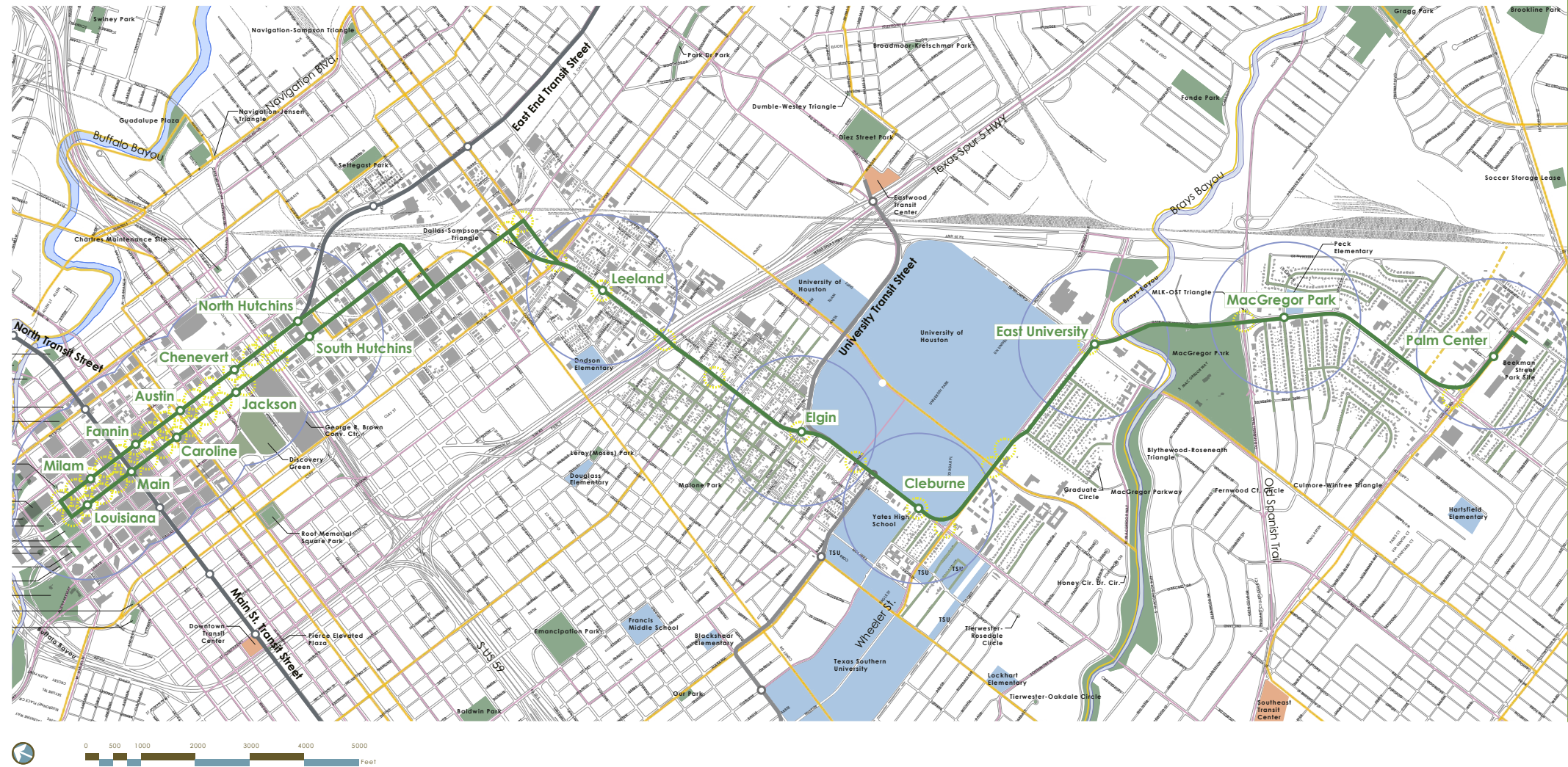
Areas of the Southeast Corridor located within the Downtown CBD (west of US-59) generally enjoy a well developed and functional pedestrian realm.

The University of Houston and Texas Southern University areas are also more developed within the pedestrian realm throughout the campuses.

Most deficient in pedestrian realm function are areas between Downtown and the U of H and TSU campuses and near the Palm Center Station. These transition areas often lack continuous sidewalk systems due to the interjections of driveways, parking lots and fences. These areas also



## Southwest





Existing sidewalk along Scott St.



Existing street furniture on MLK Blvd. along MacGregor Park



Existing streetscape along Scott St. in front of the University of Houston

generally lack street furnishings, pedestrian lighting, street trees and shade.

The more stable residential area between MacGregor Park and Griggs Road typically have paved streets, cement curbs, large street trees, but no sidewalks.

### Community Facilities

**Schools** - Schools are dependant on pedestrian and bicycle mobility in order for students to safely and efficiently arrive and depart Southeast Corridor schools. Public schools within the Southeast corridor are administered by the Houston Independent School District (HISD).

The SPARK School Park Program is a non-profit organization which increases park space by developing public school grounds into neighborhood parks. SPARK Parks within the Southeast Corridor Area are located at Dodson Elementary, Douglass Elementary, Lockhart Elementary and Peck Elementary.

### Other facilities accessed by pedestrians -

Several significant public facilities within the Southeast Corridor rely on safe and continuous sidewalks for optimum access. These public facilities include:

- ☐ Numerous CBD public buildings
- ☐ The Theater District and underground tunnel/parking system
- ☐ Toyota Center and Minute Maid Park and extensive parking lots/garages
- ☐ The G.R. Brown Convention Center and area hotels
- ☐ The US Customs House and Federal Detention Center at Capitol

- ☐ City of Houston Library on Scott St.
- ☐ Houston Post Office on Franklin
- ☐ "Justice Square" Harris County Court Bldgs.
- ☐ Palms Center Library, Police Station and Post Office
- ☐ Numerous churches including Wheeler Baptist Church and Holman Street Baptist Church.

Currently, area schools and other significant public facilities are not adequately served by safe and ample sidewalks except within the CBD and UofH/TSU areas.

### Streetscape

**Street trees** - The CBD, Wheeler and many University streets benefit from mature street tree plantings. Street trees species primarily consist of Live Oaks whose shallow root systems exacerbate sidewalk maintenance needs in the Corridor.

Recent tree planting programs by non-profit organizations within the area include:

- ☐ Martin Luther King Boulevard
- ☐ Scott Street Esplanades

The 2004 Cotswold Project focused on pedestrian enhancements, streetscapes, and street improvements in a 90-block area in the northeast sector of downtown. Featured amenities included fountains, public art, wider sidewalks, and street trees at \$68 million.

The Main Street Square, a pedestrian plaza in the heart of downtown Houston was also completed in 2004. This area includes a 250-foot reflecting pool with water jets, trees, public art, banners and upgraded sidewalks at \$8.9 million.



Also completed in 2004, the 7 1/2- mile at-grade light rail line Main Street Rail Line was developed and constructed by the Metropolitan Transit Authority. Associated pedestrian realm enhancements include upgraded sidewalks and pull outs, brick pavers, special streetlights, drinking fountains, additional landscaping, and a street clock at \$10 million.

In the southeast sector of downtown, pedestrian walkways have been upgraded through the Southeast Quadrant Streetscapes Improvements project. Improvements include new street pavement, improved drainage, sidewalks, trees and landscaping, removal of overhead utilities and traffic signal upgrades at \$8 million.

Outside of the above projects areas and the UofH/TSU areas, street furnishings such as benches, trash receptacles, recycle bins, bollards and bicycle racks are rarely visible within the Corridor today.

Pedestrian oriented lighting provides a safer and more attractive environment for night-time use of Pedestrian Realm areas. Pedestrian level lighting rarely exists within the corridor outside of the CBD and UofH/TSU areas. Currently, street lights and a few attached fixtures to building facades provide the only ambient lighting along pedestrian walkways.

Public Art

Public art adds an element of pride and interest to the pedestrian realm. In 1999, the City of Houston established an ordinance mandating that 1.75% of qualified Capital Improvement Project monies be set aside for civic art.

Public art works located within the Southeast Corridor include:

- George H.W. Bush statue in Sesquicentennial Park
- Museum of Cultural Arts, Houston (MOCAH) mural project at Lockhart Elementary School SPARK Park, 1999
- Two Medallions, located downtown along Texas Avenue, in the sidewalk of the north side of the Fannin and San Jacinto intersections.
- "Movement" located downtown on Prairie @ Travis.
- "MacGregor Monument" Located in MacGregor Park, near the University of Houston.
- "Peggy", 1927 Bronze and White Granite Sculpture by Borglum, John Gutzon (1867 - 1941) located at MacGregor Park

Mobility

**Crosswalks** - Demarcation of crosswalks at key intersections provide safe and visible pedestrian crossings of public rights-of-way. Crosswalks exist at many signaled intersections along the Southeast Corridor Transit Street; however, several key intersections are in need of signalized pedestrian crosswalks.

**Bikeways/Trails** - The Houston Bikeway Program provides a 345-mile bikeway network for urban cycling that spans across a 500 square-mile area of the city. This bikeway network is integrated into the overall transportation system. Several City of Houston bike lanes are located along Preston, Polk, Caroline, Austin, Bastrop, Walker, Velasco, York, Sampson, Cullen, Wheeler, Brays Bayou and Griggs rights-of-way. These bike lanes are often narrow and do not meet current AASHTO standards for recommended bike lane widths and demarcation.

Two Rail-to-Trail designated bikeways serve the Southeast

Corridor area: Columbia Tap and Harrisburg-Sunset Trail.

The Columbia Tap Trail is a Rails-to-Trails consisting of over 4 miles of a 10-foot wide, concrete, multi-use hike and bike trail along the old Columbia Tap railroad. The trail extends from Dixie Drive past Polk Street and into downtown, creating a greenway corridor in the Third Ward and downtown area.

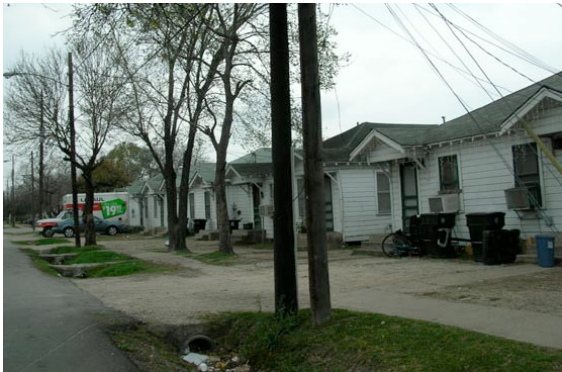
The Harrisburg-Sunset Trail is also a Rails-to-Trails project consisting of over 5 miles of trail and on-street bikeways just east of downtown Houston. This 10-foot asphalt trail is lit and runs from Drennan to Hidalgo Park. The on-street portion of the trail runs from Commerce and McKee to Avenue H and West Hendrick. A future designated connection at S. 70th Street will connect the Harrisburg-Sunset Trail to Brays Bayou.

**Public Transit** - Existing transit options within the Southeast Corridor include METRO bus, Greyhound Bus and Amtrak Train Services. Current METRO bus lines include commuter and local lines running between the Downtown Transit Center, Wheeler Station, Eastwood, TMC, Magnolia, Gulfgate and Southeast Transit Centers. Due to proximity to downtown and UofH/TSU campuses, many bus lines run throughout the Corridor.

The downtown Greyhound Bus Station is open 24 hours a day, 7 days a week and is located on Main St. at Gray. The Amtrak Train Station is located downtown near Washington and Bagby.



Service Poles and street condition looking down Scott, south of IH 45



Homes along Reeves, west of Scott



View of wooden service poles and train looking north up Sampson

### C1.2.4 Engineering/Infrastructure Inventory

#### Existing Roadway Conditions

The Southeast Corridor's study area is bounded by three freeways: IH-610, IH-45 and SH-288, which form a rough triangle around the study area. The level of service for the intersections within the Southeast Corridor, for the areas both inside and outside Downtown is at acceptable levels of service of C or better.

#### Existing Watermains

The typical life of a water main is 40-50 years. It is clear that the segments extending from Hutchins Street at both Capitol and Rusk Street to the Alabama/Wheeler Streets intersection are at the end of their life span and will require replacement soon. The age of some segments is not available from City's GIMS database.

#### Existing Sanitary Sewer Lines

The typical life of a sewer line is typically 30 to 40 years, unless the lines are rehabilitated. From the City's GIMS database, it appears that there are several sewer lines that are older than 40 years. It is not clear if these lines have been rehabilitated. This includes segments from Louisiana at Capital and Rusk to the intersection of LaBranch as well Napoleon Street from Leeland to Bremond. Though construction dates are unknown. It is recommended that the condition assessment of sewer lines be done for sewers that are more than 30 years by closed circuit television inspection.

#### Existing Storm Sewer Lines

The storm sewer lines have been identified along the proposed alignment of the LPA for sizes 30-inches and larger in diameter. Current City regulations require storm water detention for all new development. Hence, any new developments that are proposed will be required to design for storm water detention.

#### Existing Lighting

Currently along the proposed Southeast Corridor, only Wheeler Street, Martin Luther King Boulevard, and Griggs have an existing continuous lighting system. The existing poles range from 20 to 25 feet in height and are mounted on breakaway bases that are founded on drilled shafts. Existing poles are spaced between 120 to 160 feet and are staggered on opposite sides of the road. Poles are mounted behind the roadway curb at varying distances depending on site conditions. Existing lights exist along Scott Street; however, these lights are sporadic and most are mounted on wooden service poles. It is assumed that existing lighting meets current standards.

#### Summary

The existing character of the area is predominantly residential, which suggests that an analysis of existing capacity, to accept more intense redevelopment, is necessary. The existing services are old and it appears that the majority of the water mains and sewer lines are beyond their normal life expectancy. It would be wise to consider a program to replace primary services at the same time as the work is being done to install transit.

Socio-Economic Profile - Southeast Corridor		
		% Share
Total Population	98,573	
Total Households	27,945	
Population Age Profile:		
Age 0 - 4	9,946	10.1%
Age 5 - 9	8,247	8.4%
Age 10 - 14	7,559	7.7%
Age 15 - 17	4,042	4.1%
Age 18 - 20	4,881	5.0%
Age 21 - 24	7,054	7.2%
Age 25 - 34	17,546	17.8%
Age 35 - 44	15,272	15.5%
Age 45 - 49	6,123	6.2%
Age 50 - 54	5,049	5.1%
Age 55 - 59	3,753	3.8%
Age 60 - 64	2,618	2.7%
Age 65 - 74	3,495	3.5%
Age 75 - 84	2,125	2.2%
Age 85+	864	0.9%
Median Age	29.3	
Average Age	31.1	
Household Size Profile:		
1 Person	6,470	23.2%
2 Person	5,665	20.3%
3 Person	4,586	16.4%
4 Person	4,301	15.4%
5 Person	3,208	11.5%
6 Person	1,837	6.6%
7+ Person	1,878	6.7%
Average Household Size	3.26	
Period of Housing Construction:		
Built 1999 to March 2005	2,206	7.2%
Built 1995 to 1998	673	2.2%
Built 1990 to 1994	567	1.9%
Built 1980 to 1989	2,124	6.9%
Built 1970 to 1979	5,112	16.7%
Built 1960 to 1969	5,828	19.0%
Built 1950 to 1959	5,392	17.6%
Built 1940 to 1949	4,908	16.0%
Built 1939 or Earlier	3,822	12.5%
Median Year Built	1962	
Owner Occupied Households	10,845	38.8%
Renter Occupied Households	17,102	61.2%
Household Income Range:		
< \$25,000	11,236	40.2%
\$25,000 - \$49,999	8,984	32.1%
\$50,000 - \$74,999	3,785	13.5%
\$75,000 - \$99,999	1,743	6.2%
\$100,000+	2,199	7.9%
Median Household Income	\$31,200	
Median Value of Owner-Occupied Dwellings		
	\$66,907	

Source: Claritas

# C1.3 Southeast Corridor Demographic Market Overview

Demographic Overview

The Southeast Corridor area has a population of approximately 98,500 persons. Hispanics make up just over three-quarters of the local population, followed by Caucasians and African Americans (10% and 9%, respectively). The median age level is 29.3 years old, which is in the mid-range among the five corridors being examined, which vary from 27.7 to 34.9 years of age. The population age profile is balanced; persons under the age of 25 account for a 42% share of the local population in the Southeast Corridor, while persons aged 25 to 55 (prime income earning years) account for a 45% share of the total.

The average household size in the Southeast Corridor is 3.26 persons, which places it in the middle among the five corridors being examined, which range from 3.57 down to 2.18 persons per household. Households with 1 or 2 persons account for a 43% share of the total, while households of 5 or more persons account for a 25% share.

The Southeast Corridor has among the oldest housing stock among the five corridors being examined. Homes built since 1990 account for just an 11% share of the total, while

homes built pre-1970 represent a 65% share. This compares to an average of 14% and 56% share, respectively, for the total sample of housing across the five corridors. The split between rental tenure and owner-occupied homes is roughly 60-40.

In examining household income levels, the Southeast Corridor ranks in the middle among the five corridors being examined. With a median household income level of \$31,200, nearly three-quarters of area households have an income level of less than \$50,000 annually, and approximately 40% earn less than \$25,000 per year.

The median value of housing in the Southeast Corridor is in the range of \$66,900, which places it third among the five corridors being analyzed. Some 42% of area households are valued at less than \$60,000, while 80% are valued at less than \$100,000.

### Neighborhood Description

The Southeast Corridor is part of Study Area 5 (as is the East Corridor), analyzed as part of a Land Use and Demographic Profile prepared by the City's Planning and Development Department in 2003. The Southeast Corridor itself principally comprises two neighbourhoods: Eastwood Lawndale and Lawndale/Wayside. The following is a brief area description.

- Eastwood/Lawndale is a middle class community located to the southeast of the Downtown area. The area was once exclusively Anglophone, but is now largely Hispanic. The Gulf Freeway creates a commercial edge on its south border.
- Lawndale/Wayside is a collection of neighborhoods which still reflect the area's origins as a prestigious east side neighborhood. The areas of Forest Hill, Idylwood and Mason Park are shady, middle class havens with curving streets and large lots. The presence of wooded preserves such as the large Forest Park Cemetery, Villa De Matel convent, Mason Park and Wortham Golf Center – the City's first country club – have helped to maintain the area's beauty.

The following land use characteristics are identified for Study Area 5:

- Study Area 5 has a total land area of 26,368 acres. It is mainly residential and industrial. Major highways connecting the area are: I-10 in an east-west direction, US 59 (north-south), US-45 (southwest-southeast), Loop 610 to the north and east, and SH 288 in the south.

- Single-family residential uses declined by about 5% between 1990 and 2000, though still represent more than 20% of the Study Area. This decrease in single-family is visible in the Third Ward area, which is located in the southern portion of the Study Area; and in the greater Fifth Ward, located in the northwestern portion of the Study Area. These older neighborhoods and others, such as Magnolia Park, consist of small bungalows mixed with industrial and commercial uses interspersed with vacant lots. New single-family development is concentrating in an area between US 59, Wayside Dr. and I-10.
- Multi-family developments are scattered within the single-family areas, and increased 8% overall from 1990-2000. Multi-family uses cover 385 acres in the Study Area. Between 1990 and 2000, thirteen apartment complexes with a total of more than 1,200 units were permitted in the Study Area, three of them on Lyons Avenue in the Fifth Ward.
- Commercial and Office land uses make up 3.1% of the Study Area. Commercial space, with 944 acres in 1990, decreased to about 723 acres in 2000. On the other hand, office space increased from 78.4 acres in 1990 to almost 94 acres in 2000. Most commercial land is located along north-south and east-west commercial Corridors. Prominent north-south corridors include Lyons Road, Navigation Boulevard and Canal Street. Telephone Road is another Corridor that runs in a NW-SE direction. North-South Corridors include Dowling Street, Jensen Drive, Lockwood Drive and Wayside. Office sites are located along US 45 south and on Market Street. Between 1990 and 2000 commercial development was permitted mainly in the areas of Harrisburg, Canal, Wayside and Macario, and along Lyons Drive. Two office projects valued at \$1 million and above were permitted; one on Lyons Avenue and another on Lawndale Street.

- Industrial uses in Study Area 5 cover 4,070 acres (15.4% of the land), which makes it the second largest group of industrial areas of all the Study Areas. These uses increased almost 24% between 1990 and 2000. Industrial land in Study Area 5 is primarily consumed by the manufacturing and petrochemical processing industries, which dominate the eastern portion of the City. Industrial districts in this part of the City were planned during the 1930's and 1940's and are a feature along the Ship Channel. In the last decade, new manufacturing plants and warehouses have appeared in the central portion of the Study area between US 45, I-10 and Loop 610.
- Public and Institutional land is more concentrated in the south of the Study Area with the presence of Texas Southern University, University of Houston and the Port of Houston/Ship Channel. Public and Institutional land occupies 1,747 acres, or 6.6%, of the total land. In the 1990's an array of new churches and church related facilities, including educational facilities, were permitted in the mainly residential areas. These new developments and the expansion of Texas Southern University and the University of Houston accounted for most of the growth in institutional land uses from 736 acres in 1990 to 1,747 acres in 2000.
- Transportation and Utilities comprise 0.8% of the Study Area, with 205 acres of land mainly in railroads and small utility stations. During the 1990's, a new bus terminal was permitted on Harrisburg Boulevard. In addition, the City of Houston built two wastewater treatment plants and lift stations, and a wet weather facility. This last facility is located on Japhet Street and had a valuation of more than 10 million dollars.
- Parks and Open space accounted for 2.8% of the land in 2000. Parks are scarce in the area north of

- Buffalo Bayou and almost non-existent above I-10 and US 90. Linear parks and green space extend along Brays Bayou, including Mason Park with 102 acres and Gus Wortham Park with 161 acres.
- Vacant and Undeveloped land makes up 18.1% of the Study Area, somewhat less than single-family land uses. Large tracks are interspersed with industrial uses, mainly in the northeastern and eastern portions. In old neighborhoods, vacant lots are found intermingled in residential areas.
- Roads make up 22% of the Study Area, higher than the city-wide figure of 18%. Loop 610, I-45, I-10, US 59, and SH 288 all connect at some point in this Study Area.

Office Market

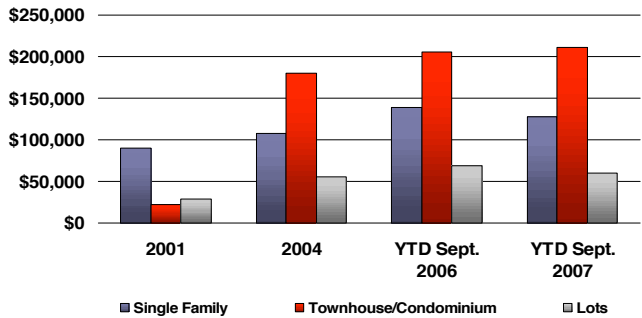
The Southeast Corridor is not part of a major office node surveyed by Cushman & Wakefield. Please refer to Houston Macro-Level Overview for market analysis.

Housing Market

The Southeast market is part of MLS District 4 (South). The average single family house price is roughly \$127,400, based upon Multiple Listing Service (MLS) data from the first nine months of 2007 compiled by the Houston Association of Realtors. At that time, the average townhouse/condominium sale price was close to \$211,000, reflecting the age and quality of stock being transacted. These values have increased in the range of 18% since 2004.

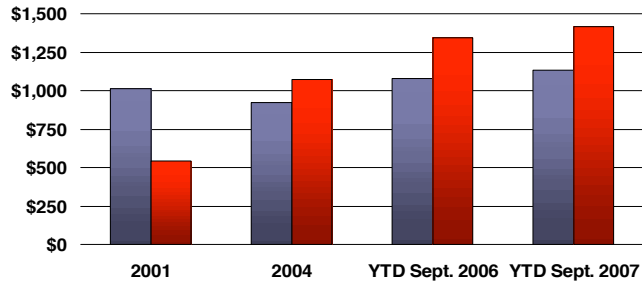
In the rental market, the single-family home rental rate was just less than \$1,130 per month, compared to \$1,420 in the townhouse/condominium segment of the market, as of September 2007. Rents are up approximately 5% from the same time one year ago.

Houston Association Of Realtors MLS Statistics  
Average Price by Property Type  
Southeast Corridor- MLS District 4 (South)



Source: Real Estate Centre at Texas A&M University, Houston Association of Realtors  
Note: Data shown is annual, other than for the current year (year-to-date March, 2007)

Houston Association Of Realtors MLS Statistics  
Average Price (Lease Rate) by Property Type  
Southeast Corridor- MLS District 4 (South)



Source: Real Estate Centre at Texas A&M University, Houston Association of Realtors  
Note: Data shown is annual, other than for the current year (year-to-date March, 2007)



## C1.4

### Summary of Initiatives

The Initiatives Plan compiles and maps all of the initiatives, projects and plans that have been prepared for lands in the study area. In addition, initiatives identified by participants in the workshop have been added.

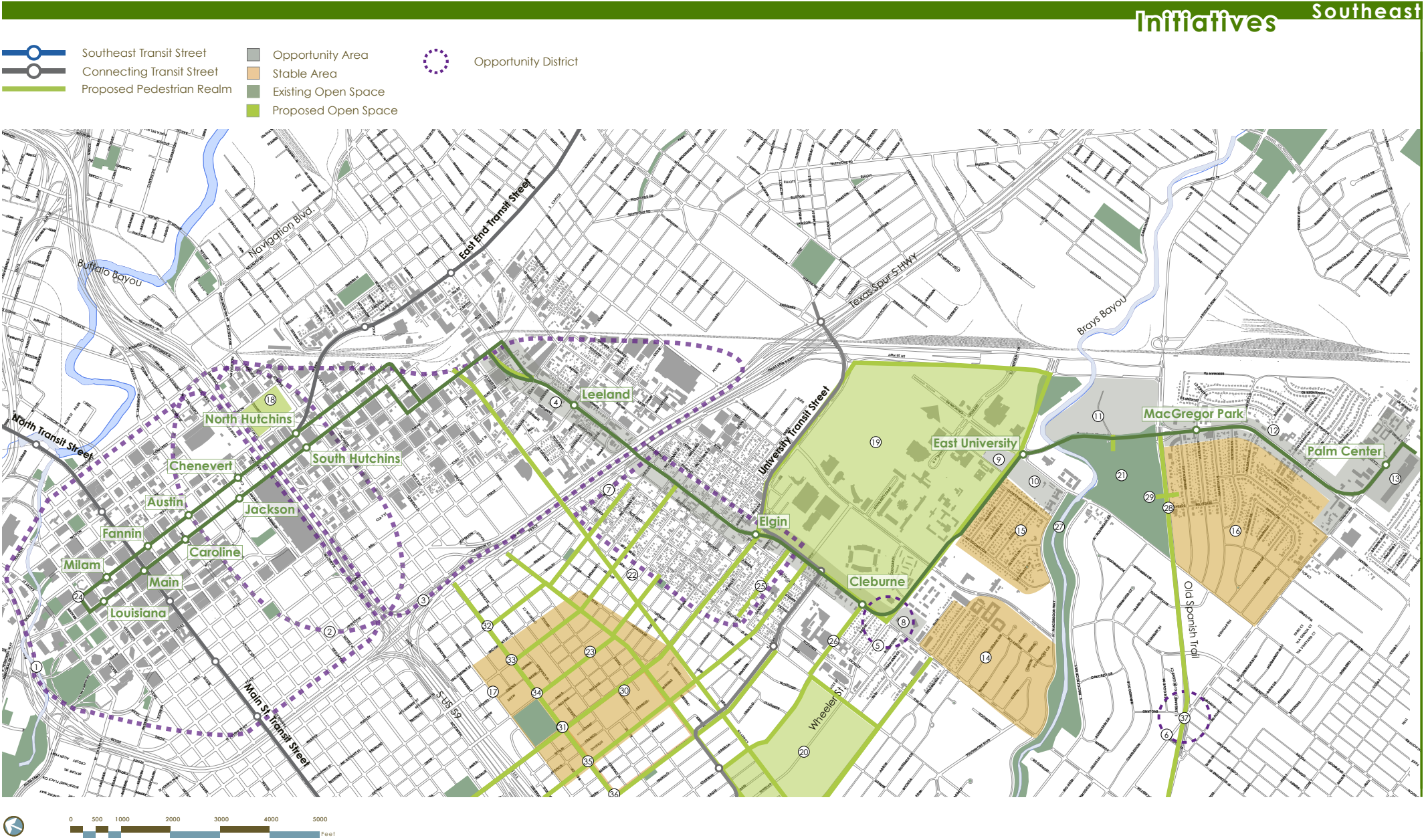
A comprehensive picture emerges of the immense planning and development efforts undertaken in the Corridor to date and the geographical relationship between the initiatives and the Transit Streets and Stations. From a strategic stance, the Initiatives Plan provides a clearer sense of the location of priority areas within the Corridor and how future Transit Oriented Development objectives might be focused and positioned to build on existing initiatives and planning efforts.

#### Opportunity Areas

These locations identify sites that could be considered for redevelopment. Some sites located along the Transit Street are suitable for intensification with transit supportive uses. These locations were identified by workshop participants.

- 1. Downtown District**  
The Downtown area is filled with redevelopment opportunities. This District is discussed in great detail in the Main Street Corridor-specific Report.
- 2. Sports and Convention District**  
This area has the potential to become an important shopping and tourism district. The George R. Brown Convention Center, Discovery Green (set to be completed in early 2008), Minute Maid Park and the proposed soccer stadium are facilities that attract many people.
- 3. South of Highway 59 between IH 45 and the Railroad**  
This District was identified as an area in transition with many opportunities for redevelopment. Several townhouse and mid-rise housing developments have recently been built in this part of the Corridor.
- 4. Land adjacent to Transit Street between McKinney St. and Wheeler St.**  
These sites are mainly under-used or vacant lots, which are suited for mixed use, Transit Oriented Development that would complement the adjacent residential neighborhoods.







Palm Center service node



MacGregor Park looking southeast towards woodlot and Old Spanish Trail

5. **Scott St. at Wheeler St. Retail Area**

Retail Concentration Areas have been identified in the Greater Southeast Management District market demand study for potential retail development (CDS Market Research). This area has a lack of quality shopping for residents and campus visitors. The proximity of this node to the Universities, residential neighborhoods, and the Transit Street creates an attractive redevelopment opportunity that could provide basic goods and services.

6. **Old Spanish Trail at Griggs Retail Area**

The OST and Griggs Street node has also been identified as a Retail Concentration Area. Local residents are currently served by the Gulfgate Center, located approximately 3 miles from the intersection.

7. **Between Pierce St. and Reeves St.**

The proximity of this residential neighborhood to the Transit Street and the IH 45, and the number of vacant lots available, make this an attractive opportunity area.

8. **Wheeler St. and Scott St.**

South of Cleburne Station, the Transit Street turns at Wheeler and Scott Street intersection. This corner is highly visible and has the potential to accommodate a higher density development with a pedestrian scale frontage.

9. **East University Station - Northwest**

The University of Houston Master Plan Open Space Framework Plan suggests that this parking lot be transformed into the Bayou Park Extension.

10. **East University Station - Southwest**

This University of Houston parking lot is located adjacent to a Transit Station - an ideal location for a mixed use development that would service the University Community and surrounding neighborhoods.

11. **East of MacGregor Park**

The woodlot property across MacGregor Park has recently been purchased and is expected to be redeveloped.

12. **Old Spanish Trail to Palm Center**

Land adjacent to the eastern end of the Transit Street is suitable for Transit Oriented Development. Development along this stretch of the Corridor is a mix of institutional, commercial, residential, and some vacant lots. The combination of the wide right of way and deep setbacks creates an environment unwelcoming to pedestrians.

13. **Palm Center**

This service node is an ideal site for transit supportive uses. Located near the highway and at the end of the Southeast Corridor, this large through site is suited for high density mixed use buildings and 2-4 level multi-family on the edges adjacent to residential neighborhoods. The Beekman Street Park is proposed for the northeast corner of the site.

Stable Areas

Workshop participants identified neighborhoods, schools and employment areas as Stable Areas. It is important to protect and enhance employment areas close to the Transit Stations so that employees can conveniently and safely walk to and from the stations. Neighborhoods will need to assess the opportunities that result from change, especially at their edges that abut the Transit Line or stations. Safe and convenient pedestrian connections to the Transit Line will encourage ridership and help support new retail and service uses that may develop near the stations. The following areas were identified as Stable Areas by workshop participants.

14. Neighborhood South of Ruth St. between Scott St. and Cullen Blvd

15. University Oaks Neighborhood

This deed-restricted neighborhood, adjacent to the University of Houston, has an organized homeowners' association, the University Oaks Civic Club.

16. Neighborhood west of MacGregor Station

17. Emancipation Park Area

This area has many cultural and historical assets to be protected: Row Houses, Progressive Armature Boxing Association (PABA), St. John Missionary Baptist Church, Grand Order of the Court of Calanthe, Original Yates High School building (Now Ryan Middle School), Eldorado Ballroom, Home of Flower-man, YMCA (Dr. John Biggers mural), Riverside General Hospital, Blackshear Elementary School, Sixth Church of Christ (only African-American Christian Science Church in Houston), Panther Party Headquarters (now a vacant lot), Jerusalem Baptist Church, Project Rowhouse and Emancipation Park.





### Pedestrian Realm

The Southeast Corridor has several neighborhood, community and city scale parks and open spaces. Workshop participants identified several initiatives for open space. In addition, there has been a significant master plan completed the University of Houston and Brays Bayou.

#### Existing Parks/Campuses:

##### 18. Emancipation Park

The park has recently been designated a protected historic landmark under the Houston Preservation Ordinance. The designation means that the park will be protected for prosperity. This place is the first public space in Texas and was originally conceived as a site for freed slaves to celebrate the anniversary of June 19, 1865, when Texas slaves were emancipated. The Friends of Emancipation Park are working to fix the park's neglected state.

##### 19. University of Houston Master Plan

It is expected that the number of students will increase from 35,000 to 45,000 students in the next ten years. In response to this probable growth, the University has completed a planning strategy for the next twenty-years. The main objectives of the Master Plan are: double the learning space, double the living space, create districts for the arts, professionals and undergraduates and increase parking.

##### 20. Texas Southern University Master Plan

The Master Plan for the campus of 11,000 students is a five-year blueprint for the maintenance, improvement and expansion of University facilities and grounds. Projected construction of new buildings is based on planned growth of the student population and related program space needs. The

University hopes to: acquire land for additional facilities, upgrade infrastructure and increase student services.

##### 21. MacGregor Park and Brays Bayou

This 100-acre park provides a range of recreational activities for all users. The Friends of MacGregor Park are working to improve connections to and within the park. They are also planning on improving the play structures and enhancing pedestrian lighting.

#### Trails/Streetscape/Connections:

##### 22. Columbia Tap Trail

A 4-mile hike and bike trail is being constructed along the old Columbia Tap railroad. Once completed, the trail will connect the neighborhoods to the existing bikeway network along Polk, McGowan and Alabama Streets, the Brays Bayou Trail, and the Dixie bike route.

##### 23. Third Ward Connectivity Project

The goal of the Third Ward to Main Street Connectivity Project is to link residents of the Third Ward to the Main Street Corridor via corridors such as Elgin Street, Blodgett Street and Old Spanish Trail.

##### 24. Transit Street

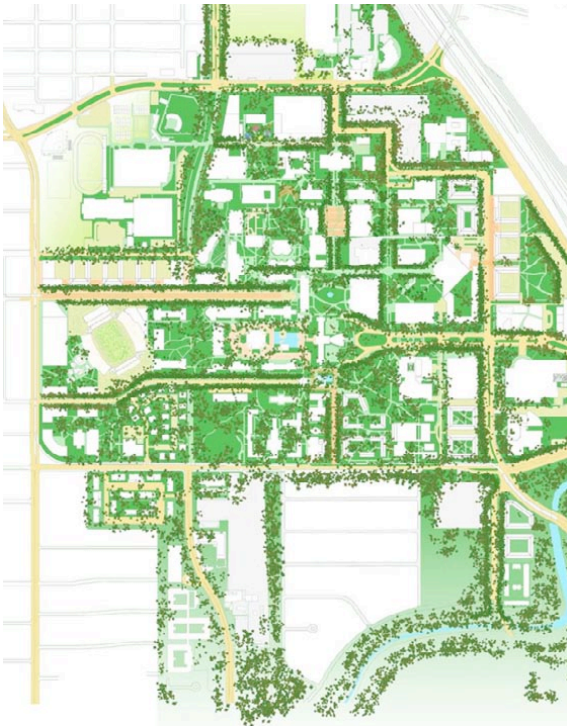
The pedestrian/cyclist environment along the Transit Street is a priority. Street furniture, lighting, bicycle racks and safe crossings are all part of an enhanced streetscape for the Corridor.

##### 25. Reeves St.

An enhanced pedestrian connection on Reeves Street was suggested to better connect the community to Scott Street.

26. **Cleburne St.**  
A pedestrian connection between Texas Southern University and University of Houston is foreseeable along Cleburne Street, especially now that there will be a Transit Station at Scott Street intersection.
27. **Project Brays**  
Brays Bayou is 31 miles long. This project consists of more than 70 individual projects, which are aimed at reducing flood risks. A few projects are strictly local initiatives with the purpose of enhancing environmental and recreational elements along Brays Bayou. In the Southeast Corridor Study Area, a trail is planned along the Bayou.
28. **Old Spanish Trail**  
In the early 1900s, this road was developed as a national highway that started in California and ended in Florida. OST has since become an important commercial street that the OST/Alameda Corridor Redevelopment Authority plans to enhance infrastructure and streetscape along this route.
29. **Pedestrian crossing to MacGregor Park**  
The Friends of MacGregor Park are lobbying for a safe pedestrian connection across Old Spanish Trail to the community to the south.

- Intersections:**  
**The Houston-Galveston Area Council's Pedestrian and Bicycle Special Districts Study (Phase II) recommended improvements at these intersections.**
30. **Delano St. at Elgin St.**
31. **Roundabout at Elgin St. and Dowling St.**
32. **Dowling St. and Hadley St.**
33. **Dowling St. and McGowan St.**
34. **Dowling St. and Tuam St.**
35. **Dowling St. and Holman St.**
36. **Dowling St. and Alabama St.**



University of Houston Master Plan, Open Space Framework

## C1.5

### Southeast Corridor Workshop

A two day workshop was held in April 2007 to engage area stakeholders and residents in Urban Corridor Planning.

The purpose of the first day of the workshop was to establish a common understanding of existing conditions and opportunities. During the day, the team met with representatives of City staff, and major landowners, to review the understanding of the context of the Corridor. During the evening session with the public, participants were asked to identify projects or initiatives that would enhance the area, as well as to help identify areas that could change and those that should be protected. As background, the Current Initiatives plan was presented at the workshop. It was a compilation of projects identified in previous strategies, plans and reports (see Chapter C1.2)

Each one of the table groups identified many opportunities in the Southeast Corridor that have been included in the Initiatives Plan (see Chapter C1.3). Suggestions of the participants, with respect to the public realm, redevelopment opportunities and areas to be protected included:

#### Public realm

- ☐ improve connectivity to MacGregor Park
- ☐ walkway from University of Houston to MacGregor Park
- ☐ pedestrian connection on Old Spanish Trail (OST) between Calhoun & MLK
- ☐ include decorative lighting and an increased number of fixtures
- ☐ include historic remembrance, African-American art and cultural feel along the Corridor and Stations
- ☐ bicycle trails connected to Corridor along Brays Bayou, Columbia Tap (currently planned)
- ☐ build open spaces next to Minute Maid Stadium
- ☐ accessible connections
- ☐ connection to Yates High School

#### Redevelopment opportunities

- ☐ west of the Transit Street from Elgin Street to Cleburne Street could accommodate mid-rise/higher density housing
- ☐ Leeland to Cleburne Streets- all of the area could to be redeveloped
- ☐ economic development node opportunity near the YMCA
- ☐ woodlot across from MacGregor Park
- ☐ new soccer stadium at North Hutchins station proposed
- ☐ Cleburne Station could have new university development retail bottom parking at top
- ☐ mixed use development, multi-story with housing above
- ☐ create two districts (Sports and Tourism District) closer to George R. Brown Convention Center
- ☐ increase shopping and employment opportunities along MLK and Scott Street - no big box
- ☐ high density area is needed along I 45 between Sampson and Cullen Streets - spaces are for sale across from Palm Center
- ☐ some initiatives for affordable housing
- ☐ emphasis on residential development in Corridor and some commercial
- ☐ encourage more students to move here



## Evolution from workshop suggestions to report Southeast

### Pedestrian Realm



Existing Pedestrian Realm as presented at the workshop



Potential Pedestrian Realm drawn during the 2-day workshop

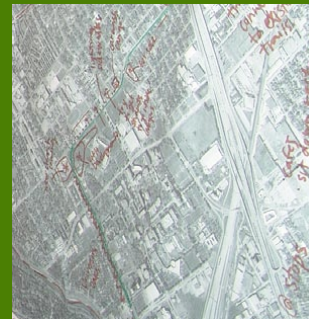


Proposed Pedestrian Realm

### Initiatives



Current Initiatives as presented at the workshop



Sample workshop comments



Summary of workshop Initiatives results



Summary of Initiatives

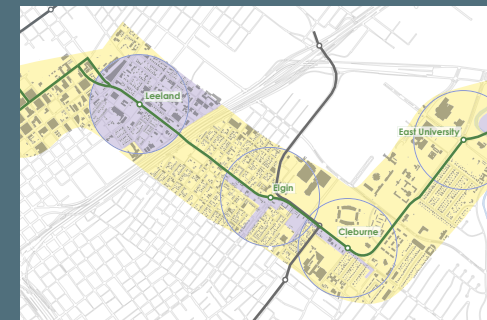
### Land Development



Existing Land Use as presented at the workshop



Land Development Concept Plan produced during the workshop



Proposed Land Development Concept Plan



Southeast Corridor Workshop



Developing a Demonstration Plan during the Workshop



Southeast Display Panels

### Areas to be protected

- ☐ 12 community assets in cluster near Emancipation Park and Project Row House
- ☐ Frenchy's Fried Chicken landmark at Scott Street by TSU and University of Houston
- ☐ local businesses that give character to the area, especially along Scott Street, the Universities and Beal Village Nursing Home

Participants were also asked to write a headline for the front page of the Houston Chronicle in 2012. The headline was to reflect the character of the Southeast Corridor once the Transit Street has been built. The facing page summarizes some of the headlines collected during this exercise. These statements clearly represent a positive future for the Southeast Corridor and the benefits of transit for the area.

Based on the input provided during the first workshop day, the preliminary Pedestrian Realm, Land Development Concept Plans, and three Demonstration Plans were developed and presented for discussion the next day.

The drawings on the previous page illustrate the input received at the workshop and the evolution to the report's Pedestrian Realm, Current Initiatives and Land Development Concept Plans (see Chapter C2 for proposed Plans).





Beacon Street, Boston, MA



Michigan Avenue, Chicago, OH



Byward Market, Ottawa, Canada

**Southeast now “Rail” - on the right track**  
METRO light shines through MacGregor park

**New commercial and business development  
created 3,000 new jobs**  
**Metro dismantles guideway going back to busses**

**Frenchy's survives and thrives on the rail**  
**Gateway to the University**

**Mass rail causes spark in affordable housing**

**Southeast Corridor - Up and Running**

These Headlines were taken during the Southeast Corridor Workshop

2
Southeast Planning Strategy

This chapter introduces the Planning Strategy and describes the Pedestrian Realm/Mobility Plan, the Land Development Concept Plan and Infrastructure Plan.

## C2.1

### The Combined Pedestrian Realm/Mobility/Land Development Concept Plan

The diagram on the facing page illustrates the combination of the Pedestrian Realm/Mobility Plan and the Development Concept Plan, which are described in detail in the sections that follow. The resulting plan is the Urban Design Plan for the Southeast Corridor. This plan illustrates broader elements of the Corridor that will eventually result in Transit Oriented Development and connections to the surrounding community.

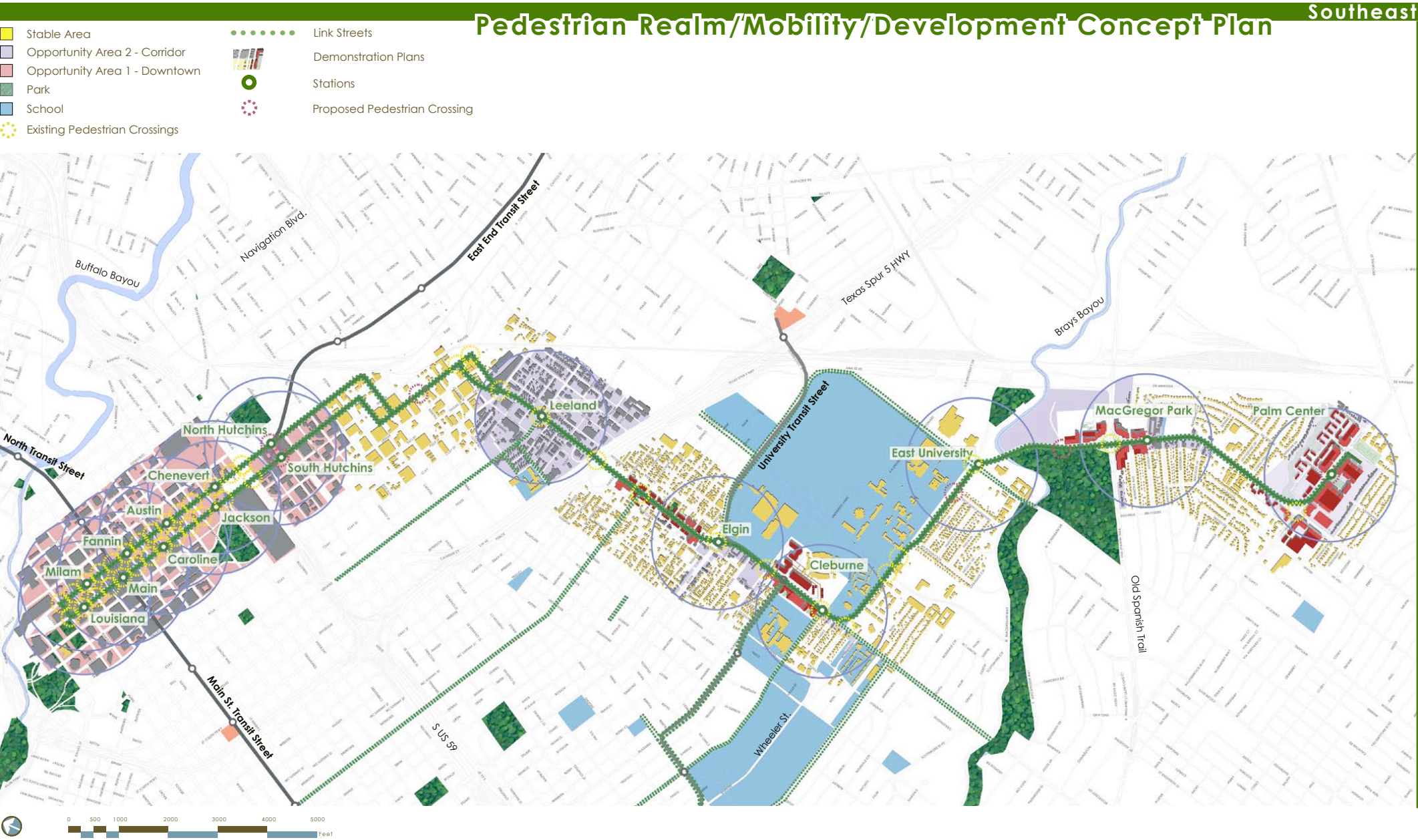
The distinguishing characteristics of this corridor are the extensive areas of the corridor that abut exiting residential neighbourhoods. The line passes through a variety of conditions from the very urban areas abutting the downtown, though the University area, and past large portions of the Corridor that are open space, such as MacGregor Park.

The Plan illustrates detailed areas that were developed during the workshop for the Southeast Corridor. It indicates that stable neighborhoods, located in proximity to the Transit Street, should be protected from redevelopment in the future. This corridor has components of the downtown as well as development opportunity areas. There are a

variety of existing uses along the corridor. The east end, near the downtown, is characterized by a tight grid pattern of streets with relatively compact blocks. Full blocks can be developed here with some ease. At the middle of the corridor is the University of Houston and Texas Southern University where the University Line will connect with the Southeast line. This area offers the opportunity to locate mixed-use development that supports the Universities. At the east end of the line is the Palm Centre which could be a large block mixed-use development centred on the intermodal station at that location.

The important connector streets lead to stations on the line as illustrated. It is clear from the Plan that such streets as Polk and Wheeler function as pedestrian links to the Transit Street. The suggested policies of this report and the accompanying street cross sections demonstrate how the pedestrian environment can be enhanced.





## C2.2

### Pedestrian Realm/ Mobility Plan

The Pedestrian Realm/Mobility Plan illustrates recommendations to improve and enhance the pedestrian realm and mobility conditions within the Southeast Corridor. The goal of these recommendations is to provide a safe, vibrant, attractive and highly functional pedestrian experience along the Southeast Corridor Transit Line (Capitol/Rusk – Paige/Delano – McKinney – York/Sampson – Scott - Wheeler – Martin Luther King Blvd. - Griggs) adjacent to proposed Transit Stations/Transit Centers and along key connecting streets.

Beautiful, tree lined, pedestrian focused streets are the framework of the Pedestrian Realm/Mobility Plan. Streets comprise a large percentage of public space and as such must be enhanced and treated as important public places. When streets function well, they are lively places where cafes, corner flower shops, public art and gardens create vibrant outdoor rooms. They are the place where the eyes of the community are view activities of the street and serve as the frontage for developments.

Foremost, the Transit Street is recommended for substantial pedestrian realm enhancements: Capitol/Rusk, Paige/Delano, McKinney, York/Sampson, Scott, Wheeler, Martin Luther King Boulevard and Griggs.

Streets intersecting the proposed Southeast Corridor transit line will provide access to and from the surrounding facilities, businesses and communities to the Transit Stations. These pedestrian connections are also recommended for pedestrian realm enhancements and include key segments of: Sampson, Roberts, McGowen, Cullen Blvd., Calhoun, Anita, Alabama, S. Lockwood, Cleburne, Blodgett and Scott.

Streetscape enhancements should include street tree plantings with the ambition to create a continuous pedestrian canopy. Street trees will clearly identify the important pedestrian streets and should provide shade to clear, wide, continuous sidewalks extending from back of curb to building fronts along the Transit Line Streets and connecting streets. In addition, pedestrian level lighting and street furnishings are appropriate on these streets.

Lighting along the Southeast Corridor Rail Line is recommended to be consolidated, as possible onto the catenary poles to be installed for the electrical service to the light rail cars. Both street lighting and pedestrian lighting can be attached to these catenary poles effectively. Consolidating lighting on these poles will avoid the visual clutter and expense of multiple poles.

Ample pedestrian crosswalks are crucial to the perception of accessibility to both sides of the Southeast Corridor Transit Line. Great care to provide safe, well-marked and unimpeded crossing opportunities especially within retail zones is critical. Bulb-outs reduce crossing distances and should be designed where on-street parking is proposed. Intersections along the Transit Corridor in need of crosswalk

enhancements are identified above. Additional crosswalks are recommended for the intersections of: Hutchins and Capitol, Hutchins and Rusk, Palmer at McKinney, University Oaks Boulevard at Wheeler, South MacGregor at Martin Luther King Boulevard, Arvilla Lane at Martin Luther King Boulevard, and Cavanaugh at Griggs.

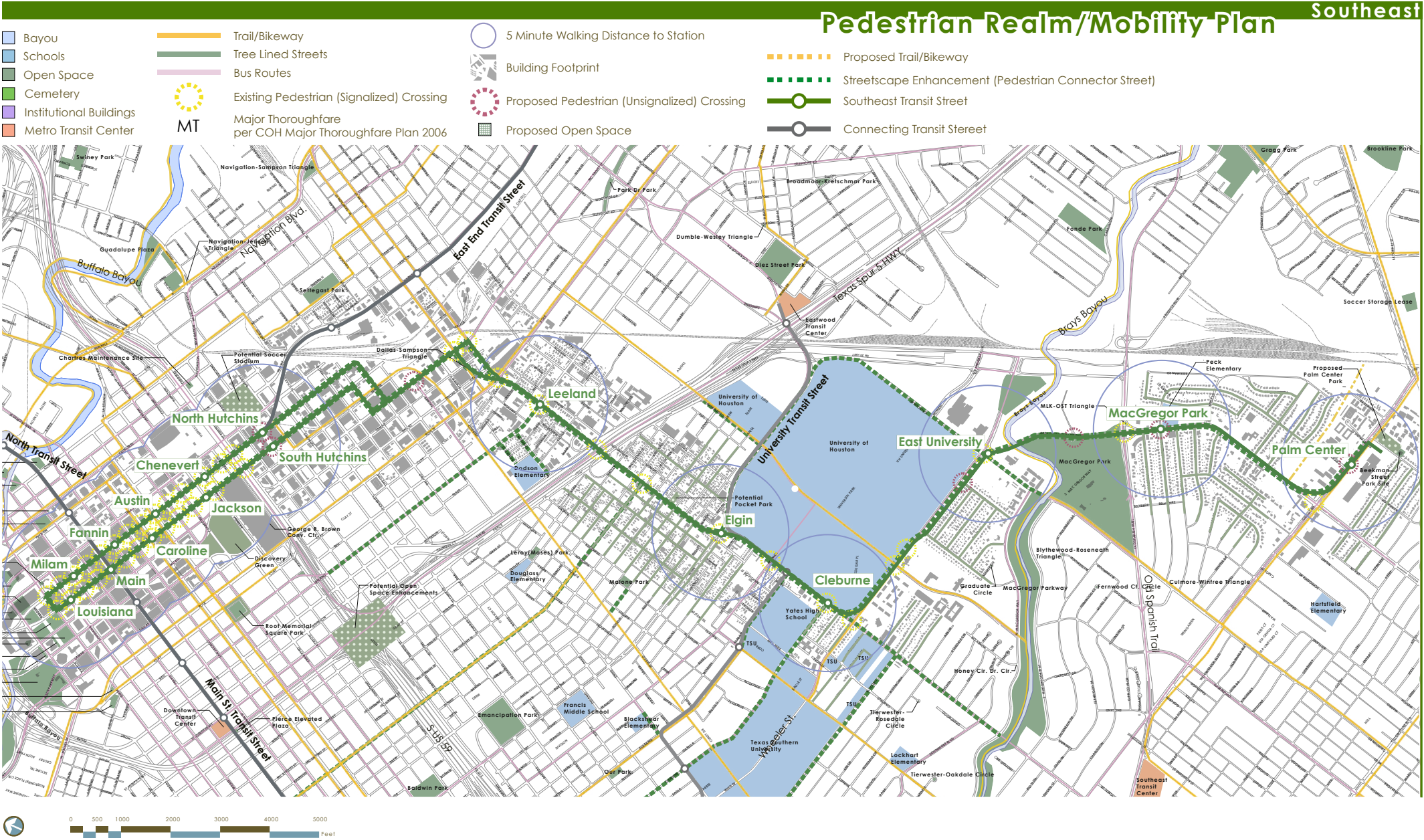
Current bike lanes serving the Southeast Corridor area should be connected to Transit Stations. These existing bike lanes are also recommended to be widened to AASHTO standards to improve their functionality and safety for bikers.

Two regional bikeway trails are recommended to be extended to the Southeast Corridor Transit Stations to improve regional accessibility to the line: Brays Bayou tributary at Palms Center Park and Buffalo Bayou Trail System.

Discovery Green and McGregor Park are ideally located on the Southeast Transit Line to provide key focal points at existing public spaces. These regional parks can provide amenities for adjacent Transit Oriented Development.

Urban Squares are smaller scale publicly accessible open spaces that should be located in association with Transit Oriented Development. These small plazas are more urban in nature and do not include active/sports facilities. Urban Squares are generally accessible to public use, often privately owned and may be gated or well lit for night security. These squares are primarily paved with planting areas, shade trees, planters, public art, fountains and seating for passive, outdoor enjoyment.





## C2.3

# Land Development Concept Plan

The Land Development Concept Plan divides the Southeast Corridor into three categories based on their development potential:

### Development Opportunity Area 1 - Downtown

– The Downtown is likely to experience large-scale redevelopment activity as a result of the planned transit facilities and proximity to the City center. It includes existing employment, office and commercial uses – uses that are typically subject to more frequent redevelopment. The Downtown also includes vacant and underdeveloped lands within the 1/4 mile station radius where Transit Oriented Development is most probable.

### Development Opportunity Area 2 - Corridor

– The Development Opportunity Area 2 is concentrated at a few key points along the Southeast Corridor, including: the area within a ¼ mile of the proposed Leeland Station which consists of mainly older underdevelopment industrial and employment lands; along the western frontage of Scott Street between the proposed Elgin and Cleburne Stations which is characterized by small plaza-type retail commercial uses, between the proposed East University and MacGregor Park Stations which include a major vacant parcel and plaza-type retail at the Martin Luther King Jr. Boulevard - Old Spanish Trail interchange;

and, around the Palm Center on Griggs Road which is characterized by the Palm Center’s service commercial uses and adjacent commercial and light industrial uses along Griggs Road.

**Stable Areas** – Stable Areas are comprised of the predominately residential neighborhoods, parks and the major university campuses within the Southeast Corridor Study Area. Stable Areas are those areas that are not likely to experience large-scale redevelopment activity as a result of the planned Urban Corridor. Areas designated as Stable include existing stable residential neighborhoods, existing parks and open space as well as significant institutional uses both within and outside of the 1/4 mile stations radius.

## C2.3.1 Demonstration Plans

Four Demonstration Plans for prototypical sites were prepared to demonstrate conceptually how Transit Oriented Development could manifest itself given the context and condition of the Southeast Corridor.

The following diagrams provide a collection of images including a site plan, photographs of development precedents and photo simulations of large lot redevelopment, a large lot with minimum frontage on the Transit Line and a large through lot.



Land Development Concept/Infrastructure Plan Southeast

- Southeast Transit Street
- Connecting Transit Street
- Corridor Study Area
- 5 Minute Walking Distance to Station
- Stable Areas
- Opportunity Area 1 - Downtown
- Opportunity Area 2 - Corridor



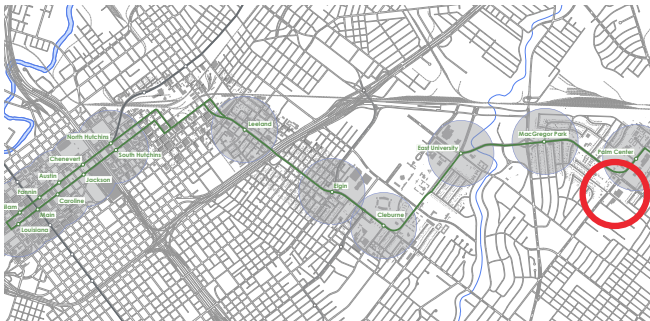
# 1 Large Through Lot

## Griggs Road and Martin Luther King Blvd

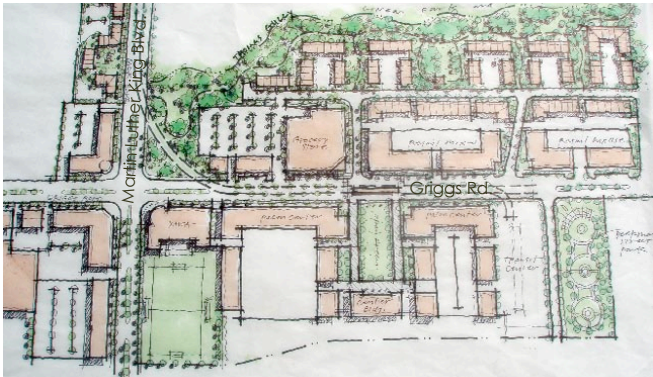
This site is an example of large through-lot development



Existing Site Conditions



Location of site in corridor

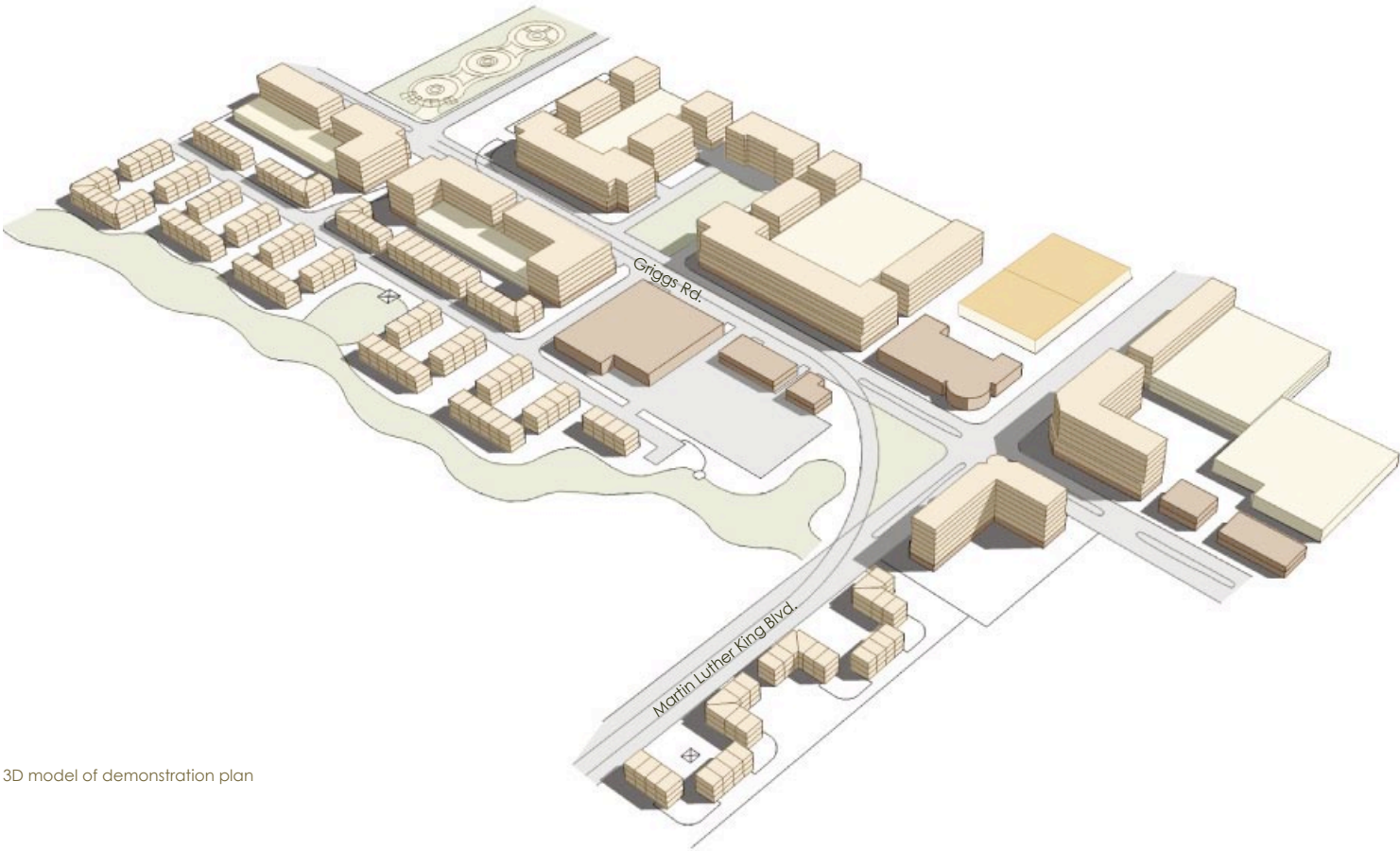


Demonstration Plan created during the workshop

Site Characteristic	The Program	The Design Solution	The Results
<ul style="list-style-type: none"><li>the site comprises approximately 1,412,868 sf of area (32.42 acres);</li><li>an extensive length of frontage of 1,796 linear feet on Griggs Rd and 1,375 linear feet on MLK Blvd;</li><li>the north edge of the site is formed by a ravine extending from Martin Luther King Blvd to Beekman Road;</li><li>the area surrounding the site is low density residential with an underutilize plaza that is being use for public service uses; and,</li><li>the site includes an internal transit terminal.</li></ul>	<ul style="list-style-type: none"><li>the program for the site includes a mix of transit supportive multi-family residential over retail, rear structured parking, town houses along the north side of the site and open space to connect community activity. A new YMCA will be built on the SW corner of the intersection; existing Palm Center-Business and Technology Center functions will be incorporated into the development along with the inter-modal transit station.</li></ul>	<ul style="list-style-type: none"><li>a mix of town houses along the ravine and Martin Luther King Blvd;</li><li>a range of 1-8 storey buildings along Griggs Road and Martin Luther King Blvd;</li><li>development of small public spaces along the main the streets to act as a focus for the community; and,</li><li>new YMCA, inter-modal station and Palm Center-Business and Technology Center uses.</li></ul>	<ul style="list-style-type: none"><li>2,162 linear feet of frontage on the Transit Corridor;</li><li>211,849 sf of retail;</li><li>475 Town Houses;</li><li>1,004 apartments; and,</li><li>parking structures at 548,347 sf.</li></ul>



Demonstration Plan Southeast



3D model of demonstration plan



Precedent- 5-storey street related apartments



Precedent- At grade retail with apartment above



Precedent- Mixed use street related building

# 2 1/2 Lot Single Frontage

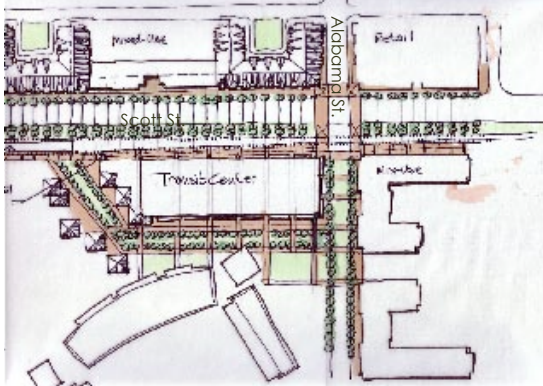
**Scott Street, from Alabama Street to Cleburne Avenue**  
Located near the University of Houston-Stadium, the site is an example of 1/2 lot single frontage development.



Existing Site Conditions



Location of site in corridor



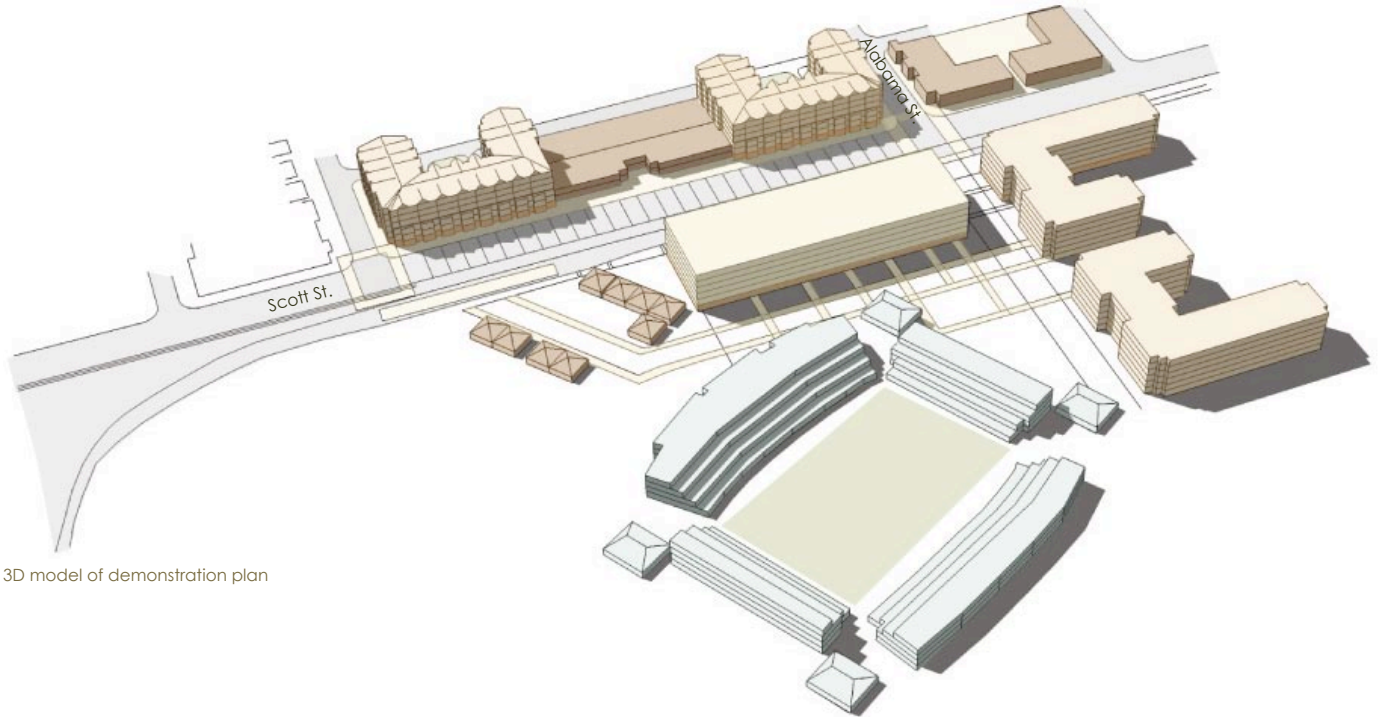
Demonstration Plan created during the workshop

Site Characteristic	The Program	The Design Solution	The Results
<ul style="list-style-type: none"><li>the site comprises approximately 566,187 sf of area (13 acres);</li><li>the site has 1, 765 linear feet on Scott St; and,</li><li>the area surrounding the site is a mix of low density residential, surface parking lots and the University. Along Scott St there is a commercial plaza and the Robertson Stadium.</li></ul>	<ul style="list-style-type: none"><li>the program for the site includes mixed-use residential over retail and parking over retail.</li></ul>	<ul style="list-style-type: none"><li>provide a for a range of to 2-6 storey buildings;</li><li>a mixed-use TOD development on Scott St;</li><li>contain a mix of transit supportive uses such as multi-family residential, and commercial; and,</li><li>create a pedestrian friendly environment next to the existing stadium as a focus to the university and the neighborhood by developing both sides of Scott St around the station.</li></ul>	<ul style="list-style-type: none"><li>1, 765 linear feet of frontage on the Transit Corridor;</li><li>175,913 sf of retail;</li><li>623 apartments; and,</li><li>parking structures at 232,375.</li></ul>



Demonstration Plan

Southeast



3D model of demonstration plan



Photomontage illustrating the potential enhanced streetscape and built form on Scott Street adjacent to the Transit Center of University of Houston



Precedent - Urban Streetscape



Precedent - Parking structure with enhanced streetscape



Precedent - 4-story apartments with at grade retail

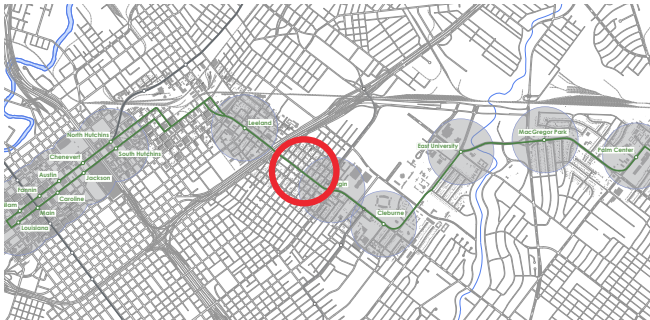
# 3 Small Infill and 1/2 Lot Single Frontage

## Scott Street

The site is located on Scott Street, from Hadley Avenue to Rosalie Street. This site is an example of small infill lots and 1/2 lot single frontage developments.



Existing Site Conditions



Location of site in corridor



Demonstration Plan created during the workshop

Site Characteristic	The Program	The Design Solution	The Results
<ul style="list-style-type: none"><li>the site comprises approximately 448,843 sf of area (11 acres);</li><li>the site has 1,586 linear feet of frontage on Scott St.; and,</li><li>the area around the site is predominantly low rise single family and vacant land with some retail.</li></ul>	<ul style="list-style-type: none"><li>the program for the site includes residential and mixed-use apartments over retail. The objective is to generate development on small lots that are vacant or underutilize.</li></ul>	<ul style="list-style-type: none"><li>a site plan providing a mix of housing types along Scott Street, including a broad range of densities from town houses, live/work units and apartment buildings over retail up to 6 stories in height.</li></ul>	<ul style="list-style-type: none"><li>1, 586 linear feet of frontage on the Transit Corridor;</li><li>45,373 sf of retail;</li><li>152 live/work units;</li><li>84 town houses; and,</li><li>203 apartments.</li></ul>



Demonstration Plan Southeast



3D model of demonstration plan



Photomontage illustrating the potential enhanced streetscape and built form on Scott Street



Precedent - Live-Work units with pedestrian link to adjacent housing



Precedent - 4-storey building with extended boulevard streetscaping



Precedent - Landscaped sidewalk

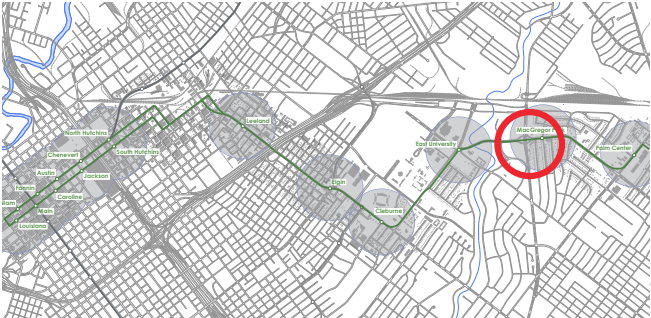
# 4 Large Through Lot

## Martin Luther King and Old Spanish Trial

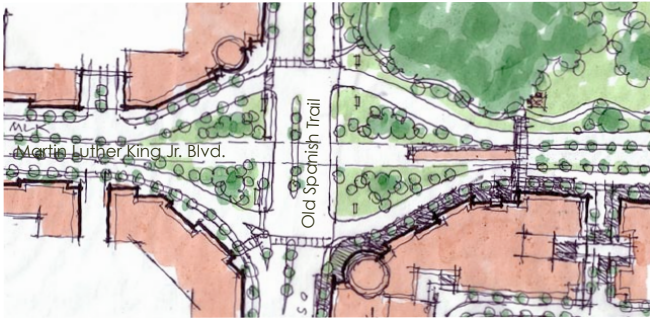
This site is an example of large through sites development.



Existing Conditions



Location of site in corridor



Demonstration Plan created during the workshop

Site Characteristic	The Program	The Design Solution	The Results
<ul style="list-style-type: none"><li>the site comprises approximately 360,806sf of area ( 8,28 acres);</li><li>the site has 1,446 linear feet on Martin Luther King and 889 linear feet on Old Spanish Trial; and,</li><li>the site surrounding the site is primary residential, vacant land, a retail plaza and a gas station service with McGregor park in proximity.</li></ul>	<ul style="list-style-type: none"><li>the program for the site is multi-family residential with structured parking;</li><li>fit new development along Martin Luther King and Old Spanish Trial so that they can improve street conditions; and,</li><li>intensify development along the intersection and around the station.</li></ul>	<ul style="list-style-type: none"><li>provide for a range of 6-8 storey buildings;</li><li>accommodate parking to the rear of the site so that it is accessible from inner roads; and,</li><li>generate a strong pedestrian environment at the street level to support transit riders and the surrounding area.</li></ul>	<ul style="list-style-type: none"><li>1, 446 linear feet of frontage on the Transit Corridor;</li><li>1,163 apartments; and,</li><li>parking 770.</li></ul>



Southeast

Demonstration Plan



3D model of demonstration plan



Precedent - Retail building with pedestrain area at street-level



Precedent - 6-storey mixed use apartment building with retail



Precedent - 6-storey mixed use apartment building with retail



### C2.3.2 Development Analysis

The following analysis is intended to test underlying development economics in the Southeast Corridor market context. The development proforma is generic in nature and is not intended to represent specific site feasibilities. The form and scale of development, (an infill townhouse site) is indicative of the type of smaller scale, transit oriented development one could expect to occur over time in this area. Office buildings, for example, are unlikely to drive denser development in this Corridor given the absence of an existing nearby office node.

### Development Scenario 1 Infill Townhouse Project

#### Description of Development

A generic development proforma was prepared for a 45-unit, 3-storey townhouse project. The land parcel measures 2 acres, and the units average 1,600 sf. There is one parking stall per unit, although additional surface parking may be available on a driveway, on-street parking or in a shared communal lot. The total development time horizon is 16 months from land acquisition to full occupancy. The proforma details are summarized on the following page.

#### Comparable Properties and Market Parameters

Two existing townhouse development projects were identified in proximity to the proposed Leeland and N. Huchins transit stops within the Southeast Corridor; the first

being Park Townhomes, situated on Park Street, and the other known as Waterhill Homes on Rusk, situated on Rusk Street.

In terms of pricing, the Leeland Park townhouse unit was 1,538 sf, and had an asking price of \$217,900. The Waterhill Homes on Rusk townhouse unit was 1,825 sf and had an asking price of \$229,900. The prices for the two comparable projects are \$142 psf and \$126 psf, respectively. These projects are similarly sized to the 1,600 sf units proposed in the development proforma illustrated below.

New projects in the area, however, face considerable pricing pressure from the existing housing stock. As outlined in the Corridor overview above, based upon MLS data from the Houston Association of Realtors, the average resale townhouse/condominium price through September 2007 was in the range of \$211,000. In contrast, single family homes were in the range of \$127,000 (generally older supply compared to the newer townhouse/condominium units that were transacted).

#### Proforma Results

Understandably, the economic price required to justify new construction of townhouses in this area is within the range of current pricing at comparable projects, with land acquisition costs and construction costs projected near the middle point of market range. This produces a similar quality and character of building finish. The development proforma presented below suggests a required sale price of around \$204,000, or \$128 psf, compared to current asking prices for similar projects in the area in the \$126

to \$142 psf range. Consequently, there appears to be a potential to upgrade the building materials and finishes (and corresponding price for the project) closer to the \$216,000 per unit range, or \$135 psf, depending upon the depth of market demand, and be comfortably within the spectrum of current market pricing.

Some observations regarding the proforma for this type of project include the following:

- Hard construction costs (excluding parking) represent 52% of total project costs. The cost of parking accounts for an additional 5% of total end unit price. This represents a relatively small component since it is assumed the parking is at grade or structured underneath the units. Although underground parking can permit higher densities, it results in considerably more cost.
- Total land costs represent roughly 18% of total end unit price – this represents land values of roughly \$720,000 per acre (or \$20 per square foot buildable) plus some carrying costs. A more dense development, provided it can be successfully marketed, will generally achieve lower land costs per square foot, helping to reduce end unit prices (although for a different type of project – particularly smaller unit sizes).
- Of course, a developer needs to profit from any development at a rate consistent with the risk. Taking into account total project costs of approximately \$8.2 million and assuming a 12% profit margin on the total project (higher when leveraged equity is considered), the required sale price per unit is \$204,200 – translating to \$128 per square foot.

Of note, the generic proforma outlined above can achieve relatively high densities (approximately 22 units

Economic Rent/Price Calculation- Southeast Corridor Townhouse Residential
Southeast

Assumptions

<b>Timing Assumptions</b>				
Land Acquisition		01-Jan-08		
Planning Period		4 months		
Construction Commencement		03-May-08		
Construction Period		12 months		
Occupancy		01-May-09		
<b>Total Development Period</b>		<b>16 months</b>		
<b>Interest Rate</b>				
Interim Financing		7.00%		
<b>Building Areas</b>				
Number of Units		45		
Average Unit Size		1,600 sq.ft.		
Number of Storeys		3		
Ground Floor Coverage		24,000 sq.ft.		
Gross Building Area		72,000 sq.ft.		
Site Coverage		0.83 times		
Land Area		2.00 acres		
<b>Residential Units</b>				
	<u>G.B.A.</u>	<u>Avg. Size</u>	<u>G.F.A.</u>	<u>G.L.A.</u>
Bach & 1 Bedroom	0%	0	0	0
2 & 2+ Bedroom	100%	1,600	72,000	72,000
Other	0%	0	0	0
<b>TOTAL</b>	100%	1,600	72,000	72,000 sq.ft.
<b>Parking Ratio</b>				
1.0 stalls per residential unit				45 stalls

Project Costs

	\$ 000's	Per Unit
<b>Land</b>		
Purchase Price	\$1,440	\$32,000
Additional Land Costs	\$72	\$1,600
Land Carrying Costs	\$141	\$3,136
<b>SUBTOTAL</b>	<b>\$1,653</b>	<b>\$36,736</b>
<b>Construction &amp; Fringe</b>		
Hard Construction Costs	\$4,773	\$106,058
Parking	\$437	\$9,719
Architect. & Engineer.	\$339	\$7,525
Site Improvements	\$261	\$5,808
Const. Contingency	\$260	\$5,789
Municipal Fees	\$13	\$289
Development Interest	\$30	\$662
<b>SUBTOTAL</b>	<b>\$6,113</b>	<b>\$135,851</b>
<b>Sales &amp; Marketing</b>		
Sales Commissions	\$324	\$7,200
Marketing & Advertising	\$113	\$2,500
<b>SUBTOTAL</b>	<b>\$437</b>	<b>\$9,700</b>
<b>TOTAL PROJECT COSTS</b>	<b>\$8,203</b>	<b>\$182,287</b>

Required Price/Rent Calculations

Required Return on Investment	12%
Required Average Sale Price	\$204,162 Unit

per acre) and still provide at least one parking space per unit. There may be an opportunity to design additional surface parking, either in front of each unit, on a street or in communal parking lot. A key consideration regarding the market feasibility for this type of development project is the potential demand generated by proximity to the transit corridor. There are clearly a number of cost-competitive housing options in this area. In order to entice existing or new residents to a new development in the Southeast Corridor, the availability of enhanced public transit and associated mixed use development as an amenity will have to be emphasized. The ability to reduce car ownership may also assist with affordability if efficient public transit can be utilized.

### Conclusions Regarding Development Analysis

The above proforma analysis demonstrates the required sales price for a new infill townhouse development. When assessing this development proforma, it is important to note it reflects new building costs which generally exceed market affordability for many area residents. In the Southeast Corridor, for example, the income levels (and corresponding homeownership affordability levels) and stock of single-detached housing available for resale places a considerable constraint on market demand.

Notably, the average price of existing homes in the Corridor is well below pricing required for most forms of new housing development. The average single detached house price in the Southeast Corridor area was just \$127,400, based upon year-to-date September data from the Houston Association of Realtors. Based upon proforma results and market analysis of comparable properties, new townhouses require a sales price in the range of \$200,000 and upwards (depending upon unit sizes), which far exceeds the cost of a larger, single-detached house on a relatively sizeable lot.

With a median household income of roughly \$31,200 across the Southeast Corridor, the affordable house price, at the median, is roughly \$121,500, and the affordable monthly housing rent is \$830 – far below the scale of prices or rents required to justify new construction. The affordability model incorporates a 6% interest rate, 30 year amortization, 20% down payment, and a calculation of monthly principal,

interest and taxes, with the assumption that 32% of gross monthly income can be dedicated to housing costs.

Of course, some new construction has and will continue to take place in this Corridor, catering to a subset of the existing and potential new residents that can afford and are seeking the lifestyle associated with transit oriented development, but this appears to be only a smaller niche market at present.

The general inequities between economic feasibility and market pricing for higher density forms of housing suggest the following:

- ❑ Transit oriented development along the Southeast Corridor is likely to be incremental. Substantial and broad market demand for transit oriented development will not appear overnight, even with new rapid transit along this Corridor.
- ❑ New rapid transit along the Corridor will likely increase demand, but higher density forms of housing (and subsequently commercial space demand) is likely to remain a niche (hopefully a growing niche) market that appeals to users that have accepted (and can afford) a more urban housing lifestyle.
- ❑ In order to facilitate faster development of the medium and higher density development along this Corridor, considerable “assistance” might have to be considered – perhaps in the form of financial subsidies for development or ongoing occupancy costs and reduced parking costs.
- ❑ Lastly, although it is not explicitly examined in the proforma here, the availability of quality public schooling is clearly an important criterion within the City for attracting families to higher density forms of housing.



## C2.4

### Infrastructure Overview

Based on the research of the existing Southeast Corridor Infrastructure it appears that water mains for over half of the length of the Corridor are at the end of their life spans. Sanitary sewer lines for at least a third of the alignment are also past their predicted life spans.

The Southeast Corridor is residential in nature for a large part of its length and redevelopment will most probably continue to be residential. The size of the lines appears to be sufficient to accommodate additional density.

As in the North and East Corridors, redevelopment will occur in specific locations in the short term but most redevelopment will occur incrementally over a long period of time. This provides the opportunity to replace and upgrade the infrastructure as the areas change. However, where existing infrastructure has exceeded its predicted life span, consideration should be given to replacing it as transit is constructed. In other areas, the City will assess the capacity and condition of the infrastructure as development occurs.

It is hoped that a standard for lighting the streets and the pedestrian realm will be implemented throughout all of the Corridors as the lines are being built.

## C2.5

### Pedestrian Oriented Cross Sections

To better understand the urban design impact of the new transit on the existing streetscapes, sections have been developed through various locations along the Southeast Corridor illustrating the existing condition of the street from the face of buildings on each side. A section showing the new streetscape has been constructed as a comparison.

The sections have been selected to indicate typical conditions on the "transit street" to show the impact of the LRT. Additionally, sections have been developed to illustrate the existing and proposed improved conditions of important connecting streets.

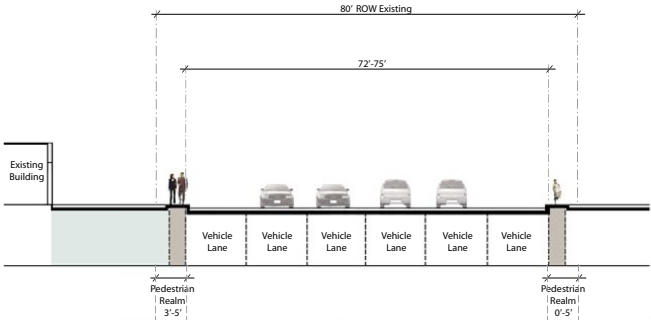
#### C2.5.1 Pedestrian Character Transit Street

The portion of the Transit Street used to illustrate typical conditions is Scott Street at Anita Street. The existing street condition is illustrated in the photo of the street. It is an 80 ft right of way that accommodates six lanes of traffic. The buildings at either side are low scaled and set well back from the curb of the street. For the most part, the sidewalks are not continuous. The proposed section illustrates the impact of the LRT down the centre of the street in its own right-of-way. The full street right-of-way is expanded to 100

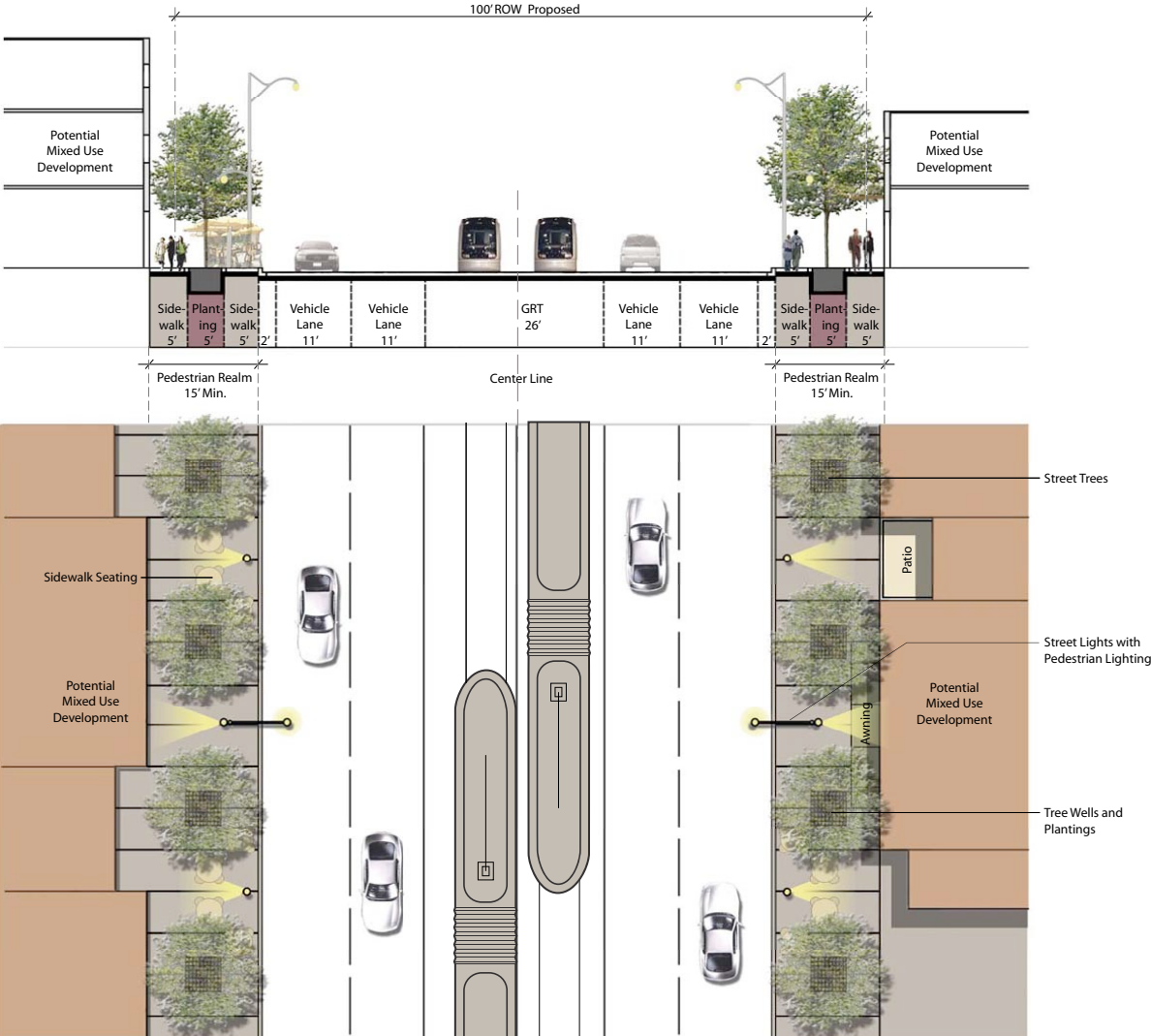
ft to accommodate transit. The pedestrian realm will be continuous and buildings will be sited close to the street to create a pedestrian scaled street.

The second Transit Street condition is taken on Martin Luther King Boulevard (MLK) at Courtelyou Street. The existing street is 113' in width and provides space for 3 lanes of traffic in each direction with a central planted median. The existing sidewalks are narrow. The proposed street has been expanded to 115' and has space for the new LRT at the center of the street with 4' planted medians on each side. Three lanes of traffic are found in each direction with the pedestrian realm developed on each side with buildings located at its edge.

Pedestrian Character Transit Street, Offset Station Platforms



Southeast Corridor Existing Section- Scott t. at Anita St.

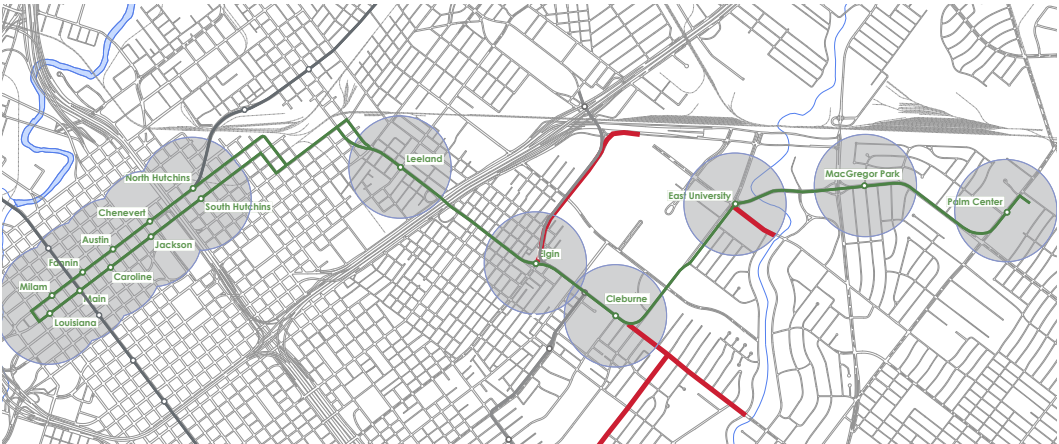
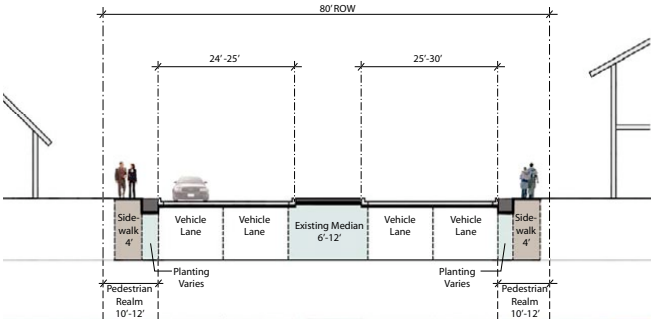


Southeast Corridor Proposed Section- Scott t. at Anita St.



C2.5.2  
Pedestrian Character Major  
Thoroughfare

Major Thoroughfare right-of-ways are typically 80 to 100 feet, and include 48 feet of pavement divided by a median of 14 to 32 feet. Rarely has a connected sidewalk system been provided. Mayor Thoroughfares that intersect with the Transit Street have been identified as Pedestrian Character Major Thoroughfares because they have the potential to provide a crucial connection from area focal points neighborhoods and schools to Transit Stations. A continuous and connected sidewalk system been provided. A prototype street cross section indicates the following:



Pedestrian Character Major Thoroughfares

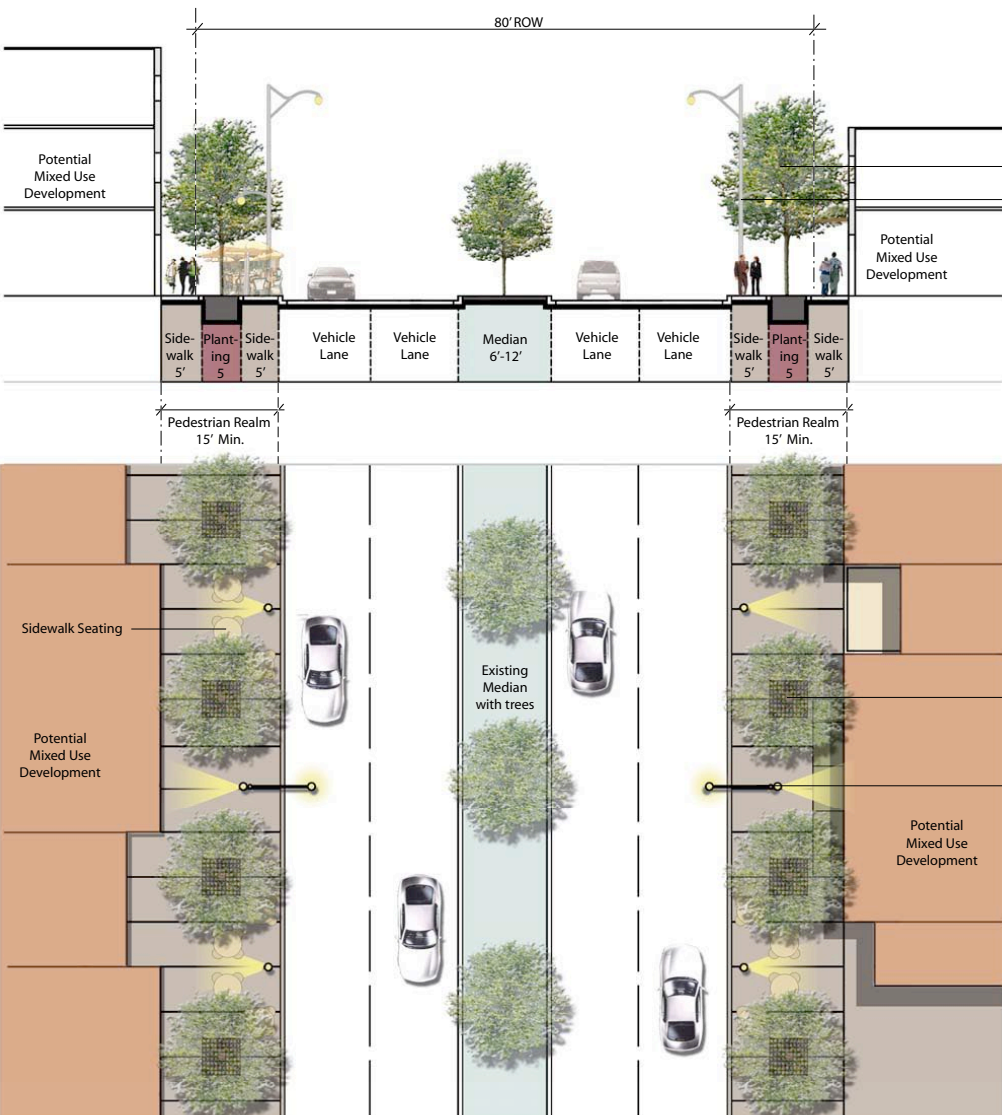


Southeast Corridor Existing Conditions - Scott St.

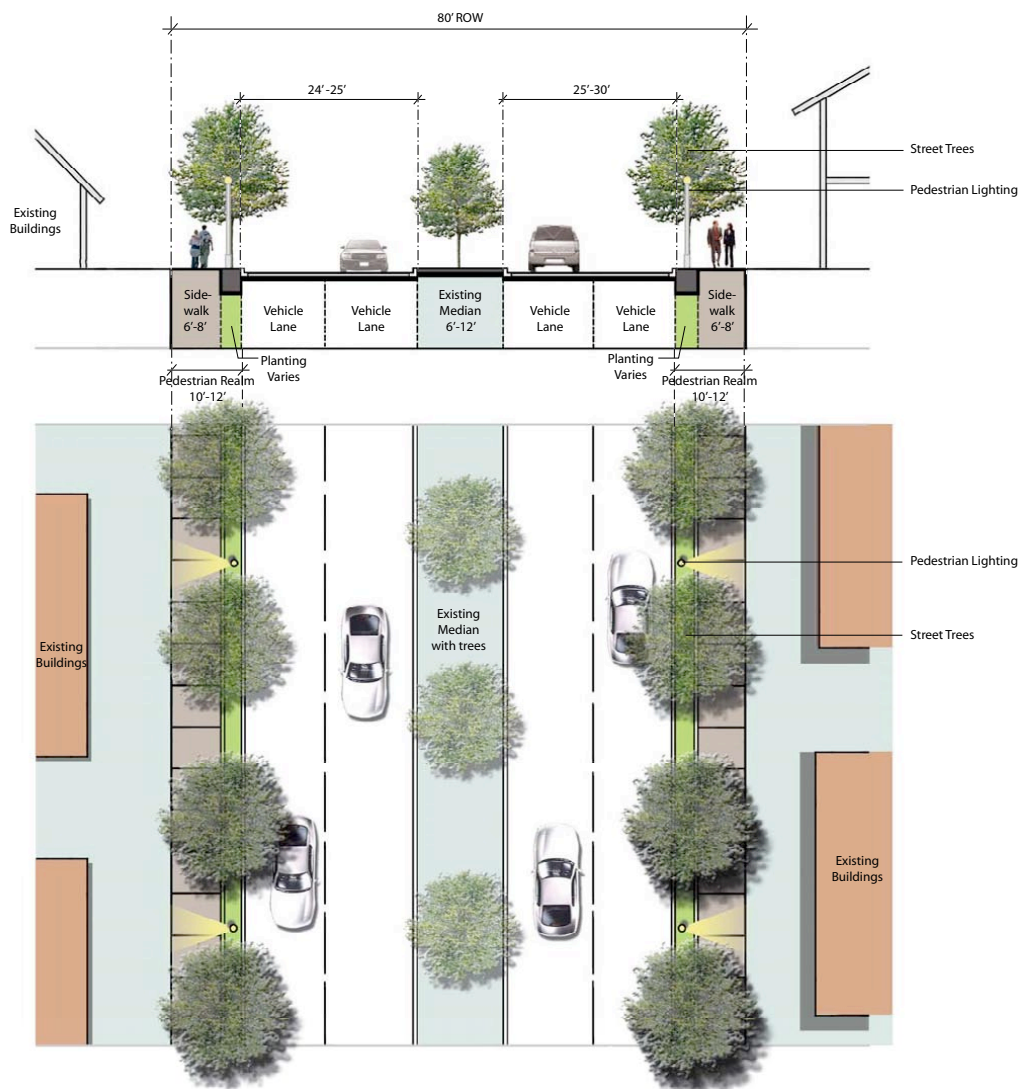


Southeast Corridor Existing Conditions - Scott St.

Pedestrian Character Major Thoroughfare, Commercial and Residential Areas Southeast



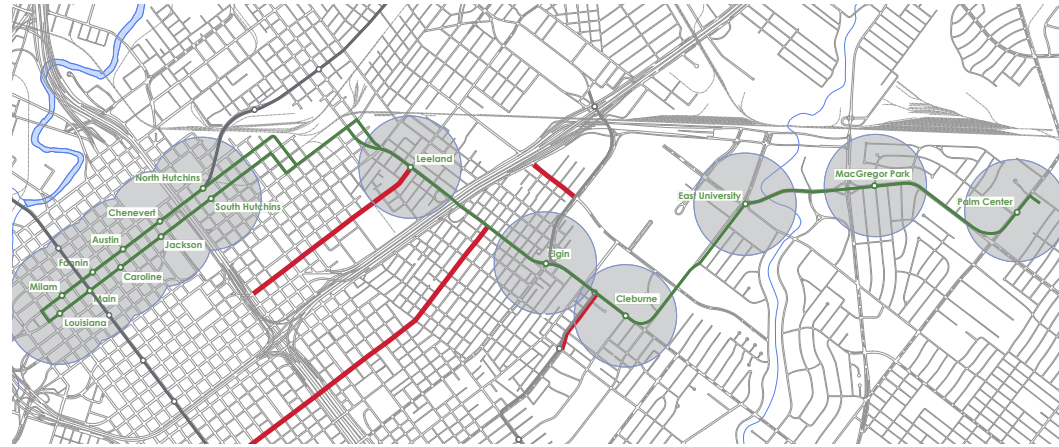
Southeast Corridor- Major Thoroughfare Proposed Section- Scott St. (Only in designated redevelopment areas.)



Southeast Corridor- Major Thoroughfare Proposed Section- Scott St.

### C2.5.3 Pedestrian Character Major Collector

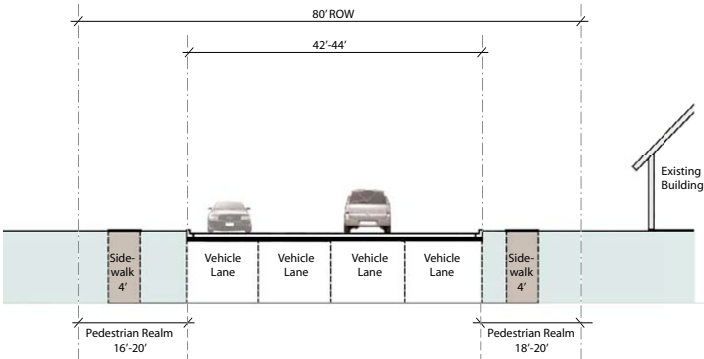
Major Collectors range from 60 - 80 feet, and include 44 feet of pavement, and ditches on both sides. Rarely is a continuous and connected sidewalk system provided. Canal Street has been identified as a Pedestrian Character Major Collector because it is an important parallel street to the Harrisburg Transit Line and edge to neighborhoods. A prototype street cross section indicates the condition:



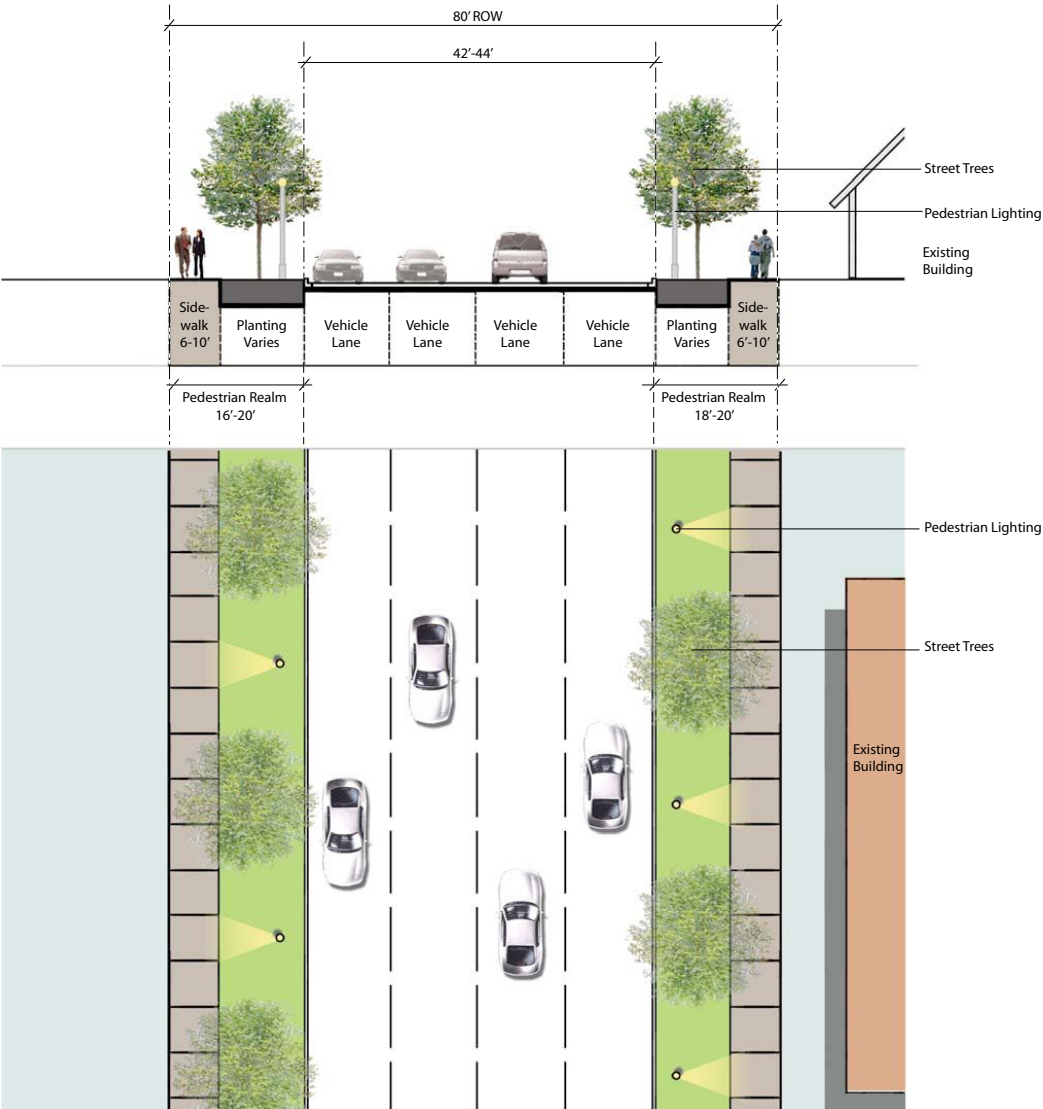
Pedestrian Character Major Collector



Pedestrian Character Major Collector Southeast



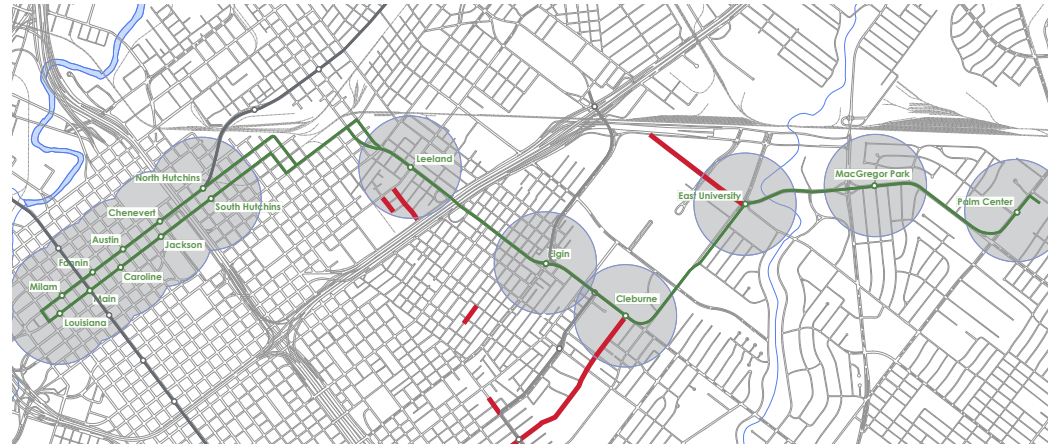
Southeast Corridor Existing Section- Mc Gowen St.



Southeast Corridor Proposed Section- Mc Gowen St.

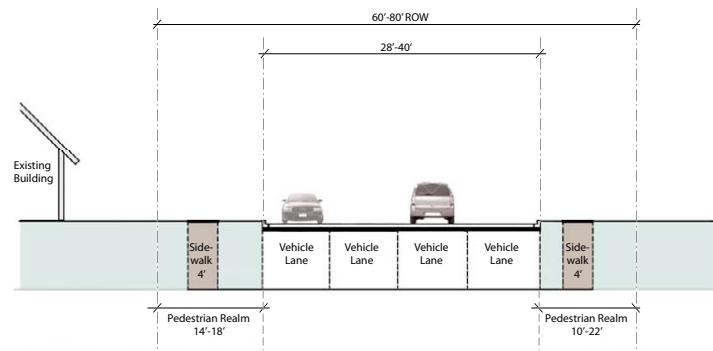
## C2.5.4 Pedestrian Character Local Street

Local street right-of-ways are typically 60 feet, and include 22 feet of pavement. Some local streets have ditches on both sides. Rarely are sidewalks provided. Some local streets that intersect with the Transit Lines have been identified as Pedestrian Character Local Streets because they have the potential to provide a crucial connection between the transit stations and a local pedestrian traffic generator, such as a school, recreation center, public park or place of worship. A prototype street cross section for a Pedestrian Character Local Street with and without a ditch indicates the following:

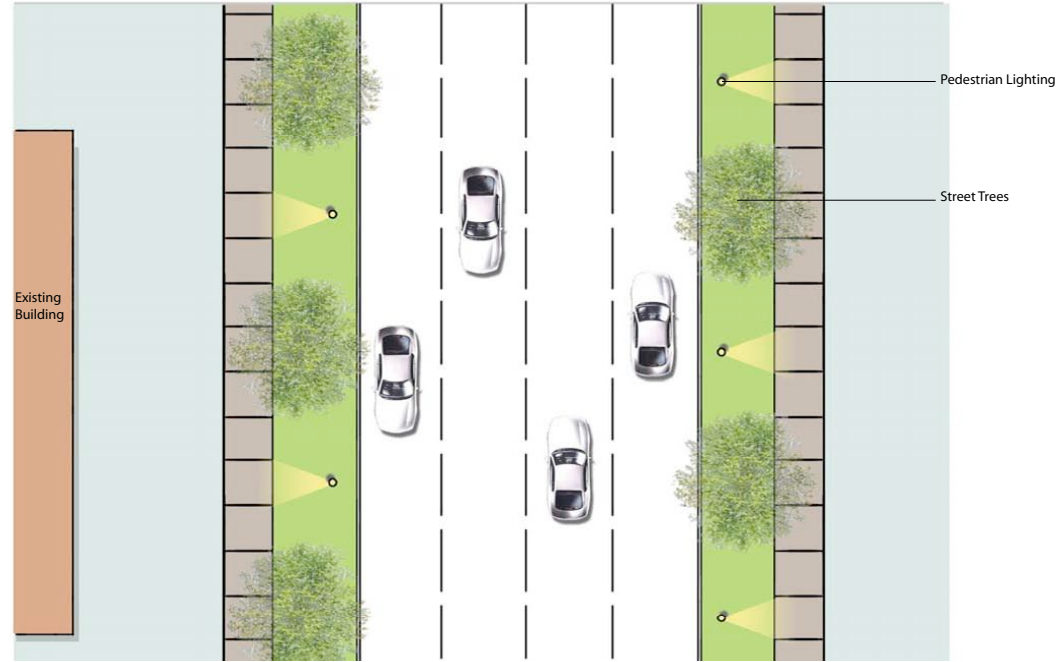
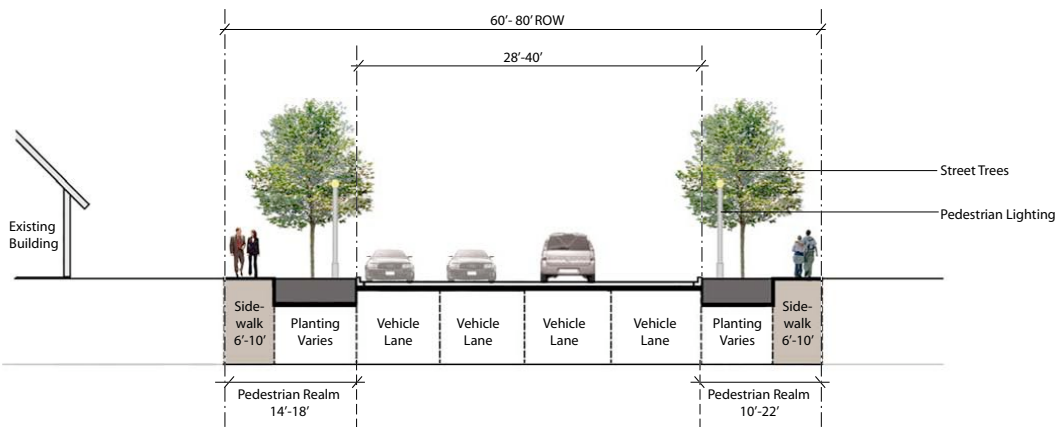


Pedestrian Character Local Street

Pedestrian Character Local Street Cross Section/Plan Southeast



Southeast Corridor Proposed Section - Cleburne St. without curb



Southeast Corridor Proposed Section - Cleburne St. with curb



Appendix

Southeast  
Implementation  
Matrix

IMPLEMENTATION - DEVELOPMENT OPPORTUNITY AREA 1 - DOWNTOWN

**Statement of Application** - applies everywhere within the defined Downtown area (to be defined)

**Key Implementation Terms:**

**Redevelopment** – The removal of buildings or structures from land and the construction or erection of other buildings or structures therein or when the existing gross floor area on a parcel is increased by 25% or more

**Grandfathering** - Application of the Ordinance Requirements shall begin on the date that the Implementing Ordinance comes into effect. It applies to New Development (see definition of New Development). It does

**New Development** - New Development refers to both the Redevelopment of existing properties or the construction of new buildings or structures on previously undevelopment properties.

**Variances** - Variances to the Implementing Ordinace are subject to the current approvals process for variances of the City of Houston. Variances shall be approved by the City that meet the following three tests to the

1. The variance is considered minor in nature.
2. The variance does not result in the achievement of a performance benefit, without achieving the basic density and urban design requirements of the Implementing Ordinance.
3. The variance assists in achieving new development that is appropriate for its context and does not create any undue adverse impact on adjacent development.

**Mandatory Requirements** – Mandatory requirements are those provisions that must be applied consistently on all new development in order to achieve the fundamental

**Performance Based Standards** – Performance Based Standards are incentive-based discretionary standards designed to encourage development that meets established development objectives. Achievement of

**Design Guidelines** – Design Guidelines are discretionary standards to guide land development to achieve a desired level of quality for the physical environment.

Mandatory Requirements for all new Development within the Development Opportunity Area 1 - Downtown	
<b>Pedestrian Realm</b>	
1	A connected sidewalk system shall be provided on both sides of streets that have been identified as Pedestrian Character to facilitate access by pedestrians to the transit stations, adjacent businesses and local pedestrian traffic generators.
2	The City shall not accept cash-in-lieu of required street trees, unless a substantiated technical reason is provided that precludes street tree planting. Where cash-in-lieu of street trees is accepted, the monies received shall be utilized to enhance tree cover in a local public park, or along the Transit Street within 1/4 of a mile of the development site from which the cash-in-lieu of street trees was accepted.
3	All buildings shall be developed with a substantial portion of their front and exterior side façades between 15 and 25 feet of the back-of-curb. It is understood that where a parcel has three sides abutting a public street, the build-within concept may not be achieved on the third side.
4	In all Transit Street Configurations, 15 feet from the back-of-curb is required for the Pedestrian Realm.
5	On all lands fronting onto a public street, a Major Thoroughfare and/or a Major Collector, the minimum built frontage requirement shall be 75 percent of the parcel frontage and shall be occupied by the main front wall of a building within the build-within zone.
6	Notwithstanding the requirements for a minimum built frontage, where an urban square is provided abutting a front and/or exterior side parcel line, the frontage occupied by the urban square shall be counted toward the minimum built frontage requirement.
7	A minimum of 75 percent of the main front wall at grade and, on a corner parcel, exterior side wall at grade of any non-residential building shall consist of windows and entranceways that facilitate visibility into the building.
8	Accessible building design, streets and publicly accessible open spaces shall conform with the requirements of the American Disabilities Act.
<b>Urban Squares</b>	
9	There shall be no compensating open space requirement for any Transit Oriented Development. Urban Squares/Plazas shall be provided in accordance with section 5.3.2.
10	Notwithstanding that there is no requirement for compensating open space, all development applications on sites greater than .5 of an acre in size shall include a location for an urban square. Urban squares are intended as formal pedestrian spaces, in support of the adjacent higher density, mixed use development.
11	Lands shall be set aside for an urban square/plaza as follows:
	for all non-residential development, the land requirement for an urban square/plaza shall constitute a minimum of 2 percent of the net developable site area;
	for all primarily residential development (where more than 80 percent of the Gross Floor Area is residential), the land requirement for an urban square/plaza shall constitute a minimum of 4 percent of the net developable site area; or,
	for development that include a mix of land uses, where the secondary use comprises at least 20 percent of the Gross Floor Area, the land requirement for an urban square/plaza shall constitute a minimum of 2% of the net developable site area;
12	An urban square shall have a minimum frontage on the abutting sidewalk of 15 feet, and a depth of at least 15 feet.
13	Large sites may include a single, large scale Urban Square/Plaza and/or a series of smaller Urban Squares/Plazas.
14	Urban squares shall be built and maintained by the landowner, and an easement with the City shall ensure that the space is open and accessible to the public at all times, as specified in the easement agreement.
<b>Development Blocks</b>	
15	For all large scale Transit Oriented Development projects (defined as projects on development blocks or parcels that are greater than 5 acres in size), the maximum development block or parcel size shall be approximately 5 acres in area. In all cases, there shall be no minimum development block or parcel area.
16	No development block or parcel frontage on a street shall exceed 600 feet. In all cases, the minimum development block or parcel frontage shall be 25 feet.
17	Large scale Transit Oriented Development projects shall provide public streets, or publicly accessible private streets, to subdivide any development block or parcel greater than 5 acres in size into smaller development blocks or parcels in accordance with this policy.
<b>Buildings</b>	
18	The minimum density for any Transit Oriented Development project shall be a Floor Area Ratio of 1.75.
19	There shall be no specified maximum density.
20	The minimum height for any Transit Oriented Development building shall be 3 storeys, or 27 feet, whichever is greater. Buildings on corner sites shall be a minimum of 4 storeys, or 36 feet, whichever is greater.

21	There shall be no specific height limit.
22	Buildings of up to 3 storeys may be built with zero setbacks to interior side parcel lines. Exterior side yards shall conform to the described build-within zones.
23	Buildings above 3 storeys may include a zero interior side yard setback for the base building of 3 storeys, but building side walls must be set back a minimum of 10 feet from the interior side yards for that component of the building above 3 storeys.
24	In all cases, the minimum rear yard setback shall be 14 feet to facilitate a potential lane access and/or a utilities easement.
<b>Encroachments</b>	
25	Temporary encroachments (i.e. awnings), may be permitted to encroach into the pedestrian realm subject to approval of a Temporary Encroachment Permit from the City.
26	Outdoor cafes and seating for restaurants may be permitted to encroach into the pedestrian realm subject to approval of a Temporary Encroachment Permit from the City.
27	Semi-permanent structures over the sidewalk, including entry features, arcades and perpendicular signage attached to the building may be permitted to encroach into the pedestrian realm subject to approval of an Encroachment Permit from the City.
28	Permanent structural components of the building (structured parking lots, colonnades and balconies) are not permitted to encroach into the defined pedestrian realm.
29	The amount of any permitted encroachment shall be established by the City on a site-by-site basis, and in consideration of the following criteria:
	the encroachment enhances pedestrian comfort by providing shade and/or protection from the rain; and,
	the encroachment does not impede pedestrian movement, and maintains an unobstructed sidewalk area of a minimum width of 5 feet.



Design Guidelines for Development Opportunity Area 1 - Downtown (non-mandatory)	
<b>Pedestrian Realm</b>	
30	Buildings shall connect to the street - by proximity, by the location of windows and entranceways and the level of architectural detail.
31	Buildings shall be sited and organized to create a street space scaled to the pedestrian, and organized to present an appropriate façade to all adjacent streets to provide interest and comfort at ground level for pedestrians.
32	Main building entrances shall, wherever possible, be oriented toward adjacent streets to provide convenient access to pedestrians and public transit; buildings, and their main public entrances, shall be located close to the front and exterior side property lines, on-street parking, and the public sidewalk.
33	Buildings are to be generally sited parallel to the public street and along the edges of parks and open spaces. The public faces of these buildings are to align with neighboring buildings in a manner that defines these spaces with a consistent building face lining the street.
34	Non-residential buildings shall, to the greatest extent possible, front onto adjacent streets, be flush with grade and provide an active use at grade in order to promote pedestrian activity.
35	Buildings shall provide active façades that include windows and entry features and, where appropriate, outdoor cafés and restaurants, community services, retail stores and display windows.
36	Street tree planting should form a continuous canopy along the street. Tree species should be selected by the applicable TIRZ/MMD to reinforce the role of the various street hierarchies within the Urban Corridors and to visually and thematically distinguish the Urban Corridors from one another. In instances where no TIRZ/MMD exists, the City will select the trees that they will plant.
37	Street trees should have a minimum size of 45 gal. and be planted 30 feet on-centre. Trees should be located in open planting pits where space permits and with wells sized at a minimum of 5'x10'. The planting pits should be filled with shrubs, perennials and annual plants. Planting pits should be edged with a low wall and/or fence.
38	Where space is limited, trees should be planted in continuous trenches. The rootball should be protected with a tree grate, ground cover or material such as gravel.
39	Where there is no room for street trees, consider a vertical shade element planted with vines so add special landscape treatment to the street.
40	Coordination of utilities, especially overhead power lines will be required during the design phase of street tree planting.
41	Consider a palette of the street furnishings, newspaper boxes, notice boards, bicycles racks, flower pots, luminaires and poles that will visually and thematically distinguish the each particular Urban Corridor from the others.
42	Concentrate mailboxes, vending machines, trash cans, and recycling bins in single locations to create active public space and minimize visual clutter.
<b>Urban Squares</b>	
43	Urban squares shall be designed to reinforce a high quality formalized relationship with its adjacent building use and streetscape.
44	Hard and soft landscape elements and features within the urban square shall be designed to define and articulate activity areas, circulation, entry points, seating and gathering areas.
45	Urban squares shall provide sitting, shade, trash receptacles and bicycle racks.
<b>Public Parks</b>	
46	Provide public amenities such as washrooms and field house where appropriate.
47	Provide programmed activities for a range of ages and demographics with emphasis on children and youth.
48	Provide a balance of passive and active park space and provide for the maximum program flexibility in the design of the parks.
49	Incorporate a greening strategy that includes tree planting and seasonal horticultural displays.
50	Incorporate sustainability practices both in terms of capital projects and operations.
51	Provide wayfinding and program information displays as well as heritage interpretation and public art.
<b>Gateways</b>	
52	Gateways shall be either architectural, stand-alone features, or landscape treatments that define the main entrances to the Urban Corridors.
53	Features shall be lit to enhance their legibility at night.
54	The scale of the gateway shall be large enough to be visible from a car at a distance of at least 300 feet.
55	Gateways shall enhance and not compete with surrounding existing architectural and natural features.
<b>Buildings</b>	
56	Corner building designs shall articulate, define and enhance the intersection at which it is located by enhancing the building's presence at each corner.
57	Buildings should 'turn' the corner, i.e. they should have primary, articulated façades towards both streets and should be visually different from adjacent development.
58	Large areas and continuous rows of monotonous and repetitive façades shall be avoided. A more textured architectural quality can be achieved by introducing variation in certain elements of the façade treatment.
59	Variation in three-dimensional elements, such as balconies, bay windows and porches, cornices, window trim, entrances and the articulation of the building mass, shall be used to create a dynamic façade.
60	Variation and articulation in the building mass including horizontal and vertical setbacks, such as step backs at the upper storeys, shall be established.
61	A pedestrian weather protection system including awnings, canopies, colonnades, or front porches along the sidewalk edges and adjacent to the urban squares/plazas and at entrances to buildings shall be considered. The City will promote Temporary or Permanent Encroachment Permits for both signage and awnings.
<b>Signage</b>	
62	Signage will address the amount and type of illumination, size, materials, typography and design.
63	Signage should be an integral part of the architecture of a building.
64	Signs should be designed to complement the building and enhance the visual appeal of the street.
65	Signs should be designed in consideration of nearby residential uses, in terms of size, materials, and location.
66	The ratio of sign band to building mass should be restricted such that the signage does not dominate the façade.
67	Mobile box signage is not allowed.
68	Neon lights are allowed when they do not dominate the signage and have no negative impacts on nearby residences.
69	Exterior lighting shall be designed to promote pedestrian comfort, safety and provide a high quality ambiance. In addition, accent lighting is required to emphasize built form and landscape elements. Pedestrian scale lighting shall be provided adjacent to streets, walkways, urban squares, pedestrian routes and in parks, urban squares and courtyards.
70	Internally lit canopies are strongly discouraged.
71	Commercial façades should be appropriately lit.
72	Pedestrian realm signage and lighting should be coordinated. Pole mounted pedestrian light fixtures with a light source at 12 to 15 feet high and a spacing of 30 to 50 feet is recommended.
<b>Mid-Block Pedestrian Connections</b>	

73	Mid-block pedestrian connections shall be provided within larger development parcels. These are intended to be designed as pedestrian landscaped lanes and should be lit, landscaped and maintained for public
74	Mid-block pedestrian connections shall provide a fine grain of pedestrian circulation and an important connection between two streets.
75	Mid-block pedestrian connections shall lead to public destinations such as schools, parks and public transit stations.
76	Mid-block pedestrian connections shall provide an address to individual residential or business frontages along their lengths.
<b>Parking</b>	
77	The City shall provide public parking lots (surface lots and/or structured parking facilities) within the Urban Corridors to augment the supply of parking.
78	On-street parking shall be promoted within all of the Urban Corridors.
79	The City shall pursue opportunities for the establishment of on-street parking in partnership with adjacent landowners where the spaces are provided on a combination of public land and private property, with public access to the parking spaces secured through agreements with the City.
80	Surface parking, loading areas, drive-through lanes and servicing facilities shall not be permitted in front of Transit Oriented Development buildings. Surface parking, drive-through lanes and/or servicing facilities may be permitted in an interior side yards, and are permitted within the rear yard.
81	Surface parking, loading areas, drive-through lanes and servicing facilities, where permitted, shall be appropriately screened from view from the street. Surface parking lots shall respect the build-within zones. Where surface parking must be provided, the visual impact of large surface lots shall be mitigated by a combination of setbacks, and significant landscaping including: pavement treatments, low walls or decorative fencing, landscape, trees and lighting throughout parking lots and along the edges.
82	Parking is encouraged to be provided in structures, either above, or where possible, below grade. Where a parking structure is above grade, it shall include a façade with active uses at grade and appropriate architectural articulation. Entrances to below grade or structured parking and service areas should occur within the building.
83	Access to parking and servicing areas should occur off side streets or service lanes and to the side or rear of buildings, where possible.
84	It is an objective of the City to limit access driveways to individual sites adjacent to the Transit Street. The City shall encourage shared access driveways and, preferably, shared rear lane access for all Transit Oriented Development. Where new development is proposed, the City shall require a minimum of 100 feet between access driveways onto the Transit Streets.
<b>Pedestrian Character Major Thoroughfare</b>	
85	The hard surface of the sidewalk (the pedestrian realm) shall be a minimum of 15 feet wide, measured from the back-of-curb to the main front wall and/or exterior side wall of any adjacent building. This requirement may include components of the public right-of-way and/or private lands, as described in the discussion of the build-within zone.
86	The design of the 15 foot pedestrian realm shall include a "furnishing zone" for utilities, street furniture and street lighting adjacent to the curb, and a minimum 7 foot, six inch unimpeded pedestrian sidewalk.
87	At all street intersections there shall be provisions for pedestrian crossings of the transit facility, regardless of whether or not the intersection is signalized. In addition, provisions for mid-block pedestrian crossings must be considered at intervals of approximately 300 feet. There shall never be a condition where distances between pedestrian crossings of the Facility exceed 600 feet. Countdown pedestrian head signals shall be provided for at all signalized crossings.
88	It is understood that the development of the required 15 foot pedestrian realm will occur over a long period of time, in conjunction with private sector redevelopment projects. In the interim, the City should build a connected sidewalk on the public component of the right-of-way concurrent with the development of the transit facilities. The maximum width of the pedestrian realm in this interim condition shall be 15 feet, to be measured from the back-of-curb to the edge of the right-of-way.
<b>Pedestrian Character Major Collector</b>	
89	The pedestrian realm shall be a minimum of 8 feet wide, measured from the back-of-curb to edge of the right-of-way.
90	The pedestrian realm shall include a minimum 6 foot wide sidewalk measured from the edge of the right-of-way. The sidewalk shall be continuous and extend across driveways.
91	The pedestrian realm shall include a planted boulevard with street trees next to the curb.
92	The planted boulevard should also be the location for utility poles, placed on the same alignment as the street trees.
<b>Pedestrian Character Local Street</b>	
93	The pedestrian realm shall be a minimum of 19 feet wide, measured from the back-of-curb or the edge of the outside vehicle lane to the edge of the right-of-way.
94	The pedestrian realm shall include a minimum 6 foot wide sidewalk. The sidewalk shall be continuous and extend across driveways.
95	On Pedestrian Character Local Streets with curbs, the pedestrian realm shall include a planted boulevard with street trees next to the curb.
96	On Pedestrian Character Local Streets with curbs, the pedestrian realm shall include a planted boulevard with street trees next to the curb.
97	The planted boulevard shall also be the location for utility poles, placed on the same alignment as the street trees.
98	On Pedestrian Character Local Streets with road side ditches, the tree shall be planted on the outside edge of the ditch adjacent to the sidewalk.
99	On Pedestrian Character Local Streets with road side ditches, utility poles shall be placed adjacent to the edge of the right-of-way.
<b>Engineering/Infrastructure</b>	
100	The width of travel lanes along streets with transit should generally be 10'-11" in width,
101	Alleys should be designed to provide an 12'-0" paved surface,
102	No access should be allowed from the street for new developments fronting onto the street with transit,
103	All new development fronting on to streets with transit should indicated space for the provision of alleys or access to the site from side streets,
104	A plan for access to sites fronting onto the Transit Street should be developed by the proponent before construction of the Transit Line showing the following:
	The preferred location for access into site along the line,
	A phasing plan for combined access over time,
	A phasing plan for the implementation of alleys or service lanes.
105	Provision for cross walks between stations should an integral part of the design of the streets with transit. The maximum distance between a station and a crosswalk shall be 1/4 of a mile.
106	The radius of corner conditions should be determined with the pedestrian in mind. Tighter radii corners slow traffic speeds and protect pedestrians.
	Along the streets with transit corner radii for through streets should be no more then a 25'-0" radius.
	For non through streets intersecting the transit street corner radii should be reduced to 20'-0"
107	Bicycle lanes should be explored as part of the design, access and phasing plans for the corridor streets. Where there is not enough room for bike lanes on transit streets, they should be part of the design of the connector streets that access stations.
108	Infrastructure services need to be developed with future intensification of the corridors in mind,

109	Infrastructure should be implemented as transit is being built,
110	The implementation and design of infrastructure should be carried out comprehensively including all departments of the City as well as utility providers,
111	All utilities should be buried along the corridors,
112	Consideration should be given to burying utilities under alleys,
113	Where it is impossible to bury utilities, the location of above ground components must be coordinated with the design of the pedestrian realm following the following guidelines:
	utility poles and transformers shall be located where they do not impact on the movement of pedestrians,
	utility poles and transformers shall be located according to an overall plan for the entire corridor,
	the form and design of above grade components to be approved by the City and Metro.
	Where possible, utilities should be located in alleys,
114	Accessibility should be designed into all sidewalk conditions along the corridors.

Additional Implementation Terms:

- Abutting** – two or more parcels sharing a common boundary of at least 1 point.
- Block** – all land fronting on one side of a street between the nearest streets, intersecting, meeting or crossing the aforesaid street.
- Easement** – a negotiated interest in the land of another which allows the easement holder specified uses or rights without actual ownership of the land.
- Encroachment** – a physical structure or partial structure that advances beyond established property boundaries into abutting properties.
- Exterior side wall** – the exterior side wall of a building or structure abutting a right-of-way or open space.
- Facade** – the exterior walll of a building exposed to public view or that wall viewed by persons not within the building.
- Frontage** – the minimum straight line distance between the intersection of the side lot lines and the front lot line.
- Grade** – the average elevation of the finished surface of the ground adjacent to the exterior walls of the building or structure.
- Gross Floor Area** – the number of square feet of total floor area bounded by the exterior faces.
- Net Developable Site Area** – the portion of a parcel or site that is remaining after requirements for minimum setbacks, yards, urban squares, easements and right-of-ways.
- Parcel/Lot line, front, exterior, rear** – the legal boundary of a parcel or lot of land.
- Pedestrian Realm** – the pedestrian realm is the area from the back-of-curb to the face of the adjacent building.
- Main front wall** – the main front exterior wall of a building or structure.
- Setback** – the horizontal distance measured at right angles to the boundary of the parcel, lot or block of land, between the main wall of the building and the main boundary.
- Transit Street** – A transit street is a street along which the transit line currently exists or is planned to be located.



## IMPLEMENTATION - DEVELOPMENT OPPORTUNITY AREA 2 - CORRIDOR

**Statement of Application** - applies on sites that about the Transit Street and are within 1/4 mile of a Transit Station

**Key Implementation Terms:**

**Redevelopment** – The removal of buildings or structures from land and the construction or erection of other buildings or structures therein or when the existing gross floor area on a parcel is increased by 25% or more through the construction of additions to existing buildings.

**Grandfathering** - Application of the Ordinance Requirements shall begin on the date that the Implementing Ordinance comes into effect. It applies to New Development (see definition of New Development). It does not apply to minor additions or improvements that are not defined as New Development.

**New Development** - New Development refers to both the Redevelopment of existing properties or the construction of new buildings or structures on previously undevelopment properties.

**Variances** - Variances to the Implementing Ordinance are subject to the current approvals process for variances of the City of Houston. Variances shall be approved by the City that meet the following three tests to the satisfaction of the City:

- 1. The variance is considered minor in nature.
- 2. The variance does not result in the achievement of a performance benefit, without achieving the basic density and urban design requirements of the Implementing Ordinance.
- 3. The variance assists in achieving new development that is appropriate for its context and does not create any undue adverse impact on adjacent development.

**Mandatory Requirements** – Mandatory requirements are those provisions that must be applied consistently on all new development in order to achieve the fundamental

**Performance Based Standards** – Performance Based Standards are incentive-based discretionary standards designed to encourage development that meets established development objectives. Achievement of performance based standards results in the reduction or dispensation of otherwise mandatory requirements.

**Design Guidelines** – Design Guidelines are discretionary standards to guide land development to achieve a desired level of quality for the physical environment.

Mandatory Requirements within Development Opportunity Area 2 - Corridor	
Pedestrian Realm	
1	A connected sidewalk system shall be provided on both sides of streets that have been identified as Pedestrian Character to facilitate access by pedestrians to the transit stations, adjacent businesses and local pedestrian traffic generators.
2	The City shall not accept cash-in-lieu of required street trees, unless a substantiated technical reason is provided that precludes street tree planting. Where cash-in-lieu of street trees is accepted, the monies received shall be utilized to enhance tree cover in a local public park, or along the Transit Street within 1/4 of a mile of the development site from which the cash-in-lieu of street trees was accepted.
3	All buildings, with the exception of street facing townhouse units, shall be developed with a substantial portion of their front and exterior side facades between 15 and 25 feet of the back-of-curb. It is understood that where a parcel has three sides abutting a public street, the build-within concept may not be achieved on the third side.
4	In all Transit Street Configurations, 15 feet from the back of curb is required for the Pedestrian Realm.
5	Where the rear yard or interior side yard of a Transit Oriented Development site abuts a single detached house, an angular plane shall be implemented to control the height of the building. The angular plane shall be established as follows:
6	a line from the abutting rear parcel line and/or the abutting interior side parcel line to be drawn to a point 10 feet above grade; then,
7	a 45 degree angle from the previous point into the development site shall establish the maximum height of buildings within the development site.
8	Within the identified Development Opportunity Area 2 - Corridor, street facing townhouses with no street facing garage shall ensure that the main front wall of the unit be built within 15 and 30 feet of the back-of-curb.
9	Where front garages are proposed, the main front wall of the building shall be built within 20 and 40 feet of the back of the curb.
10	In all cases within the identified Development Opportunity Area 2 - Corridor, the exterior side build-within zone for street townhouses shall be between 15 and 30 feet of the back edge of the curb.
11	In locations where the public street right-of-way is equal to, or greater than the required 15 feet, the build-within zone shall be established from the edge of the street right-of-way and shall be between 0 and 10 feet.
12	On corner parcels within the identified Development Opportunity Area 2 - Corridor, the exterior side yard shall also include a build-within zone located between 15 and 25 feet from the back edge of the curb, and the main exterior side wall shall occupy a minimum of 60 percent of the depth of the parcel, within the build-within zone.
13	All residential buildings with direct access to dwelling units from the street, shall be elevated a minimum of 2 feet 6 inches to provide privacy and a sense of entry to the unit. The maximum elevation from grade to the entrance landing shall be 5 feet.
14	On all lands fronting onto a public street, a Major Thoroughfare and/or a Major Collector, the minimum built frontage requirement shall be 75 percent of the parcel frontage and shall be occupied by the main front wall of a building within the build-within zone.
15	Notwithstanding the requirements for a minimum built frontage, where an urban square is provided abutting a front and/or exterior side parcel line, the frontage occupied by the urban square shall be counted toward the minimum built frontage requirement.

16	A minimum of 75 percent of the main front wall at grade and, on a corner parcel, exterior side wall at grade of any non-residential building shall consist of windows and entranceways that facilitate visibility into the building.
17	Accessible building design, streets and publicly accessible open spaces shall conform with the requirements of the American Disabilities Act.
18	Urban squares shall be built and maintained by the landowner, and an easement with the City shall ensure that the space is open and accessible to the public at all times, or as identified in the easement agreement.
<b>Optional Performance Based Standards for Development Opportunity Area 2 - Corridor (non-mandatory)</b> Applies on sites within 1/4 mile of a Transit Station and generates no undue adverse impact on the stability of the neighbourhood (to be defined) To utilize the following standards:	
<b>Urban Squares</b>	
19	There shall be no compensating open space requirement for any Transit Oriented Development. Urban Squares/Plazas shall be provided in accordance with section 5.3.2.
20	Notwithstanding that there is no requirement for compensating open space, all development applications on sites greater than .5 of an acre in size shall include a location for an urban square. Urban squares are intended as formal pedestrian spaces, in support of the adjacent higher density, mixed use development.
21	Lands shall be set aside for an urban square/plaza as follows:
	for all non-residential development, the land requirement for an urban square/plaza shall constitute a minimum of 2 percent of the net developable site area;
	for all primarily residential development (where more than 80 percent of the Gross Floor Area is residential), the land requirement for an urban square/plaza shall constitute a minimum of 4 percent of the net developable site area; or,
	for development that include a mix of land uses, where the secondary use comprises at least 20 percent of the Gross Floor Area, the land requirement for an urban square/plaza shall constitute a minimum of 2% of the net developable site area;
<b>Parking</b>	
22	For all retail and service commercial uses, including restaurants - a minimum of 2.0 and a maximum of 4.0 spaces/1,000 square feet of Gross Leaseable Floor Area.
23	For hotels/inns - a minimum of 1.0 and a maximum of 1.25 spaces per room.
24	For all office uses - a minimum of 2.0 and a maximum of 3.0 spaces/1,000 square feet of Gross Leaseable Floor Area.
25	For all condominium-based residential uses, a minimum of 1.0 and a maximum of 1.75 spaces per unit, inclusive of visitor parking.
26	For all fee simple residential uses – a minimum/maximum of 2.0 spaces per unit.
27	Where a public parking facility is developed, Transit Oriented Developments within 300 feet the City may reduce the minimum parking requirement, in recognition of the enhanced public parking supply. The reduction of the minimum parking requirement shall be determined by the City on a case-by-case basis.
28	Parking requirements for any individual development do not necessarily need to be provided on the same parcel, or on a parcel contiguous to the development. Required parking for any Transit Oriented Development may be provided on any parcel within 300 feet of the development that is being served by the parking facility.
29	Where a Transit Oriented Development is unable, or does not wish to provide all of the required parking spaces, the City may accept cash-in-lieu of the parking spaces. The minimum parking requirement shall be used to calculate any parking space deficiency. The cost of each parking space shall be established by the City, and may be waived for any specific development, at the discretion of the City. The funds raised through this provision shall be utilized by the City's Parking Authority solely for the purchase of property for public parking and/or the building of public parking structures in proximity to the Transit Street where the fees were collected.
All of the following must be achieved:	
<b>Development Blocks</b>	
30	For all large scale Transit Oriented Development projects (defined as projects on development blocks or parcels that are greater than 5 acres in size), the maximum development block or parcel size shall be approximately 5 acres in area. In all cases, there shall be no minimum development block or parcel area.
31	No development block or parcel frontage on a street shall exceed 600 feet. In all cases, the minimum development block or parcel frontage shall be 25 feet.
32	Large scale Transit Oriented Development projects shall provide public streets, or publicly accessible private streets, to subdivide any development block or parcel greater than 5 acres in size into smaller development blocks or parcels in accordance with this policy.
<b>Buildings</b>	
33	The minimum density for any Transit Oriented Development project shall be a Floor Area Ratio of 1.00.
34	There shall be no specified maximum density.
35	The minimum height for any Transit Oriented Development building shall be 2 storeys, or 18 feet, whichever is greater. Buildings on corner sites shall be a minimum of 3 storeys, or 27 feet, whichever is greater.
36	Where any Transit Oriented Development building abuts a street, the building height shall be established as follows:
	the main front wall and/or exterior side wall shall be permitted up to 3 storeys (or 27 feet, whichever is greater) within the corresponding build-within zone; and,
	for any main front wall and/or exterior side wall above 3 storeys (or 27 feet, whichever is greater), the building shall be stepped back from the main front wall and/or the exterior side wall of the base building by a minimum of 5 feet.
37	There shall be no specific height limit.
38	Buildings of up to 3 storeys may be built with zero setbacks to interior side parcel lines. Exterior side yards shall conform to the described build-within zones.
39	Buildings above 3 storeys may include a zero interior side yard setback for the base building of 3 storeys, but building side walls must be set back a minimum of 10 feet from the interior side yards for that component of the building above 3 storeys.
40	In all cases, the minimum rear yard setback shall be 14 feet to facilitate a potential lane access and/or a utilities easement.

<b>Encroachments</b>	
41	Temporary encroachments (i.e. awnings), may be permitted to encroach into the pedestrian realm subject to approval of a Temporary Encroachment Permit from the City.
42	Outdoor cafes and seating for restaurants may be permitted to encroach into the pedestrian realm subject to approval of a Temporary Encroachment Permit from the City.
43	Semi-permanent structures over the sidewalk, including entry features, arcades and perpendicular signage attached to the building may be permitted to encroach into the pedestrian realm subject to approval of an Encroachment Permit from the City.
44	Permanent structural components of the building (structured parking lots, colonnades and balconies) are not permitted to encroach into the defined pedestrian realm.
45	The amount of any permitted encroachment shall be established by the City on a site-by-site basis, and in consideration of the following criteria: the encroachment enhances pedestrian comfort by providing shade and/or protection from the rain; and, the encroachment does not impede pedestrian movement, and maintains an unobstructed sidewalk area of a minimum width of 5 feet.
<b>Parking</b>	
46	The City shall provide public parking lots (surface lots and/or structured parking facilities) within the Urban Corridors to augment the supply of parking.
47	On-street parking shall be promoted within all of the Urban Corridors.
48	The City shall pursue opportunities for the establishment of on-street parking in partnership with adjacent landowners where the spaces are provided on a combination of public land and private property, with public access to the parking spaces secured through agreements with the City.
49	Surface parking, loading areas, drive-through lanes and servicing facilities shall not be permitted in front of Transit Oriented Development buildings. Surface parking, drive-through lanes and/or servicing facilities may be permitted in an interior side yards, and are permitted within the rear yard.
50	Surface parking, loading areas, drive-through lanes and servicing facilities, where permitted, shall be appropriately screened from view from the street. Surface parking lots shall respect the build-within zones. Where surface parking must be provided, the visual impact of large surface lots shall be mitigated by a combination of setbacks, and significant landscaping including: pavement treatments, low walls or decorative fencing, landscape, trees and lighting throughout parking lots and along the edges.
51	Parking is encouraged to be provided in structures, either above, or where possible, below grade. Where a parking structure is above grade, it shall include a facade with active uses at grade and appropriate architectural articulation. Entrances to below grade or structured parking and service areas should occur within the building.
52	Access to parking and servicing areas should occur off side streets or service lanes and to the side or rear of buildings.
53	It is an objective of the City to limit access driveways to individual sites adjacent to the Transit Street. The City shall encourage shared access driveways and, preferably, shared rear lane access for all Transit Oriented Development. Where new development is proposed, the City shall require a minimum of 100 feet between access driveways onto the Transit Streets.
54	Within the identified Development Opportunity Area 2 - Corridor, where on-street parking is provided, the number of spaces may be deducted from the parking requirements of the abutting Transit Oriented Development.
<b>Design Guidelines for Development Opportunity Area 2 - Corridor (non-mandatory)</b>	
<b>Pedestrian Realm</b>	
55	Buildings shall be sited and organized to create a street space scaled to the pedestrian, and organized to present an appropriate façade to all adjacent streets to provide interest and comfort at ground level for pedestrians.
56	Main building entrances shall, wherever possible, be oriented toward adjacent streets to provide convenient access to pedestrians and public transit; buildings, and their main public entrances, shall be located close to the front and exterior side property lines, on-street parking, and the public sidewalk.
57	Buildings are to be generally sited parallel to the public street and along the edges of parks and open spaces. The public faces of these buildings are to align with neighboring buildings in a manner that defines these spaces with a consistent building face lining the street.
58	Non-residential buildings shall, to the greatest extent possible, front onto adjacent streets, be flush with grade and provide an active use at grade in order to promote pedestrian activity.
59	Buildings shall provide active façades that include windows and entry features and, where appropriate, outdoor cafés and restaurants, community services, retail stores and display windows.
60	Buildings shall connect to the street - by proximity, by the location of windows and entranceways and the level of architectural detail.
61	Street tree planting should form a continuous canopy along the street. Tree species should be selected by the applicable TIRZ/MMD to reinforce the role of the various street hierarchies within the Urban Corridors and to visually and thematically distinguish the Urban Corridors from one another. In instances where no TIRZ/MMD exists, the City will select the trees that they will plant.
62	Street trees should have a minimum size of 45 gal. and be planted 30 feet on-centre. Trees should be located in open planting pits where space permits and with wells sized at a minimum of 5'x10'. The planting pits should be filled with shrubs, perennials and annual plants. Planting pits should be edged with a low wall and/or fence.
63	Where space is limited, trees should be planted in continuous trenches. The rootball should be protected with a tree grate, ground cover or material such as gravel.
64	Where there is no room for street trees, consider a vertical shade element planted with vines so add special landscape treatment to the street.
65	Coordination of utilities, especially overhead power lines will be required during the design phase of street tree planting.
66	Consider a palette of the street furnishings, newspaper boxes, notice boards, bicycles racks, flower pots, luminaires and poles that will visually and thematically distinguish the each particular Urban Corridor from the others.
67	Concentrate mailboxes, vending machines, trash cans, and recycling bins in single locations to create active public space and minimize visual clutter.
<b>Urban Squares</b>	
68	An urban square shall have a minimum frontage on the abutting sidewalk of 15 feet, and a depth of at least 15 feet.
69	Large sites may include a single, large scale Urban Square/Plaza and/or a series of smaller Urban Squares/Plazas.
70	Urban squares shall be designed to reinforce a high quality formalized relationship with its adjacent building use and streetscape.



71	Hard and soft landscape elements and features within the urban square shall be designed to define and articulate activity areas, circulation, entry points, seating and gathering areas.
72	Urban squares shall provide sitting, shade, trash receptacles and bicycle racks.
<b>Public Parks</b>	
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<b>Gateways</b>	
79	Gateways shall be either architectural, stand-alone features, or landscape treatments that define the main entrances to the Urban Corridors.
80	Features shall be lit to enhance their legibility at night.
81	The scale of the gateway shall be large enough to be visible from a car at a distance of at least 300 feet.
82	Gateways shall enhance and not compete with surrounding existing architectural and natural features.
<b>Buildings</b>	
83	Corner building designs shall articulate, define and enhance the intersection at which it is located by enhancing the building's presence at each corner.
84	Buildings should 'turn' the corner, i.e. they should have primary, articulated facades towards both streets and should be visually different from adjacent development.
85	Large areas and continuous rows of monotonous and repetitive façades shall be avoided. A more textured architectural quality can be achieved by introducing variation in certain elements of the façade treatment.
86	Variation in three-dimensional elements, such as balconies, bay windows and porches, cornices, window trim, entrances and the articulation of the building mass, shall be used to create a dynamic façade.
87	Variation and articulation in the building mass including horizontal and vertical setbacks, such as step backs at the upper storeys, shall be established.
88	A pedestrian weather protection system including awnings, canopies, colonnades, or front porches along the sidewalk edges and adjacent to the urban squares/plazas and at entrances to buildings shall be considered. The City will promote Temporary or Permanent Encroachment Permits for both signage and awnings.
<b>Signage</b>	
89	Signage will address the amount and type of illumination, size, materials, typography and design.
90	Signage should be an integral part of the architecture of a building.
91	Signs should be designed to complement the building and enhance the visual appeal of the street.
92	Signs should be designed in consideration of nearby residential uses, in terms of size, materials, and location.
93	The ratio of sign band to building mass should be restricted such that the signage does not dominate the facade.
94	Mobile box signage is not allowed.
95	Neon lights are allowed when they do not dominate the signage and have no negative impacts on nearby residences.
96	Exterior lighting shall be designed to promote pedestrian comfort, safety and provide a high quality ambiance. In addition, accent lighting is required to emphasize built form and landscape elements. Pedestrian scale lighting shall be provided adjacent to streets, walkways, urban squares, pedestrian routes and in parks, urban squares and courtyards.
97	Internally lit canopies are strongly discouraged.
98	Commercial facades should be appropriately lit.
99	Pedestrian realm signage and lighting should be coordinated. Pole mounted pedestrian light fixtures with a light source at 12 to 15 feet high and a spacing of 30 to 50 feet is recommended.
<b>Mid-Block Pedestrian Connections</b>	
100	Mid-block pedestrian connections shall be provided within larger development parcels. These are intended to be designed as pedestrian landscaped lanes and should be lit, landscaped and maintained for public
101	Mid-block pedestrian connections shall provide a fine grain of pedestrian circulation and an important connection between two streets.
102	Mid-block pedestrian connections shall lead to public destinations such as schools, parks and public transit stations.
103	Mid-block pedestrian connections shall provide an address to individual residential or business frontages along their lengths.
<b>Pedestrian Character Major Thoroughfare</b>	
104	The hard surface of the sidewalk (the pedestrian realm) shall be a minimum of 15 feet wide, measured from the back-of-curb to the main front wall and/or exterior side wall of any adjacent building. This requirement may include components of the public right-of-way and/or private lands, as described in the discussion of the build-within zone.
105	The design of the 15 foot pedestrian realm shall include a "furnishing zone" for utilities, street furniture and street lighting adjacent to the curb, and a minimum 7 foot, six inch unimpeded pedestrian sidewalk.
106	At all street intersections there shall be provisions for pedestrian crossings of the transit facility, regardless of whether or not the intersection is signalized. In addition, provisions for mid-block pedestrian crossings must be considered at intervals of approximately 300 feet. There shall never be a condition where distances between pedestrian crossings of the Facility exceed 600 feet. Countdown pedestrian head signals shall be provided for at all signalized crossings.
107	It is understood that the development of the required 15 foot pedestrian realm will occur over a long period of time, in conjunction with private sector redevelopment projects. In the interim, the City should build a connected sidewalk on the public component of the right-of-way concurrent with the development of the transit facilities. The maximum width of the pedestrian realm in this interim condition shall be 15 feet, to be measured from the back-of-curb to the edge of the right-of-way.
<b>Pedestrian Character Major Collector</b>	
108	The pedestrian realm shall be a minimum of 8 feet wide, measured from the back-of-curb to edge of the right-of-way.

109	The pedestrian realm shall include a minimum 6 foot wide sidewalk measured from the edge of the right-of-way. The sidewalk shall be continuous and extend across driveways.
110	The pedestrian realm shall include a planted boulevard with street trees next to the curb.
111	The planted boulevard should also be the location for utility poles, placed on the same alignment as the street trees.
<b>Pedestrian Character Local Street</b>	
112	The pedestrian realm shall be a minimum of 19 feet wide, measured from the back-of-curb or the edge of the outside vehicle lane to the edge of the right-of-way.
113	The pedestrian realm shall include a minimum 6 foot wide sidewalk. The sidewalk shall be continuous and extend across driveways.
114	On Pedestrian Character Local Streets with curbs, the pedestrian realm shall include a planted boulevard with street trees next to the curb.
115	On Pedestrian Character Local Streets with curbs, the pedestrian realm shall include a planted boulevard with street trees next to the curb.
116	The planted boulevard shall also be the location for utility poles, placed on the same alignment as the street trees.
117	On Pedestrian Character Local Streets with road side ditches, the tree shall be planted on the outside edge of the ditch adjacent to the sidewalk.
118	On Pedestrian Character Local Streets with road side ditches, utility poles shall be placed adjacent to the edge of the right-of-way.
<b>Engineering/Infrastructure</b>	
119	The width of travel lanes along streets with transit should generally be 10-11' in width,
120	Alleys should be designed to provide an 12'-0" paved surface,
121	No access should be allowed from the street for new developments fronting onto the street with transit,
122	All new development fronting on to streets with transit should indicated space for the provision of alleys or access to the site from side streets,
123	A plan for access to sites fronting onto the Transit Street should be developed before construction of the Transit Line showing the following: The preferred location for access into site along the line, A phasing plan for combined access over time, A phasing plan for the implementation of alleys or service lanes.
124	Provision for cross walks between stations should an integral part of the design of the streets with transit. The maximum distance between a station and a crosswalk shall be 1/4 of a mile.
125	The radius of corner conditions should be determined with the pedestrian in mind. Tighter radii corners slow traffic speeds and protect pedestrians. Along the streets with transit corner radii for through streets should be no more then a 25'-0" radius. For non through streets intersecting the transit street corner radii should be reduced to 20'-0"
126	Bicycle lanes should be explored as part of the design, access and phasing plans for the corridor streets. Where there is not enough room for bike lanes on transit streets, they should be part of the design of the connector streets that access stations.
127	Infrastructure services need to be developed with future intensification of the corridors in mind,
128	Infrastructure should be implemented as transit is being built,
129	The implementation and design of infrastructure should be carried out comprehensively including all departments of the City as well as utility providers,
130	All utilities should be buried along the corridors,
131	Consideration should be given to burying utilities under alleys,
132	Where it is impossible to bury utilities, the location of above ground components must be coordinated with the design of the pedestrian realm following the following guidelines: utility poles and transformers shall be located where they do not impact on the movement of pedestrians, utility poles and transformers shall be located according to an overall plan for the entire corridor, the form and design of above grade components to be approved by the City and Metro. Where possible, utilities should be located in alleys,
133	Accessibility should be designed into all sidewalk conditions along the corridors.

**Additional Implementation Terms:**

**Abutting** – two or more parcels sharing a common boundary of at least 1 point.

**Block** – all land fronting on one side of a street between the nearest streets, intersecting, meeting or crossing the aforesaid street.

**Easement** – a negotiated interest in the land of another which allows the easement holder specified uses or rights without actual ownership of the land.

**Encroachment** – a physical structure or partial structure that advances beyond established property boundaries into abutting properties.

**Exterior side wall** – the exterior side wall of a building or structure abutting a right-of-way or open space.

**Facade** – the exterior walll of a building exposed to public view or that wall viewed by persons not within the building.

- Frontage** – the minimum straight line distance between the intersection of the side lot lines and the front lot line.
- Grade** – the average elevation of the finished surface of the ground adjacent to the exterior walls of the building or structure.
- Gross Floor Area** – the number of square feet of total floor area bounded by the exterior faces.
- Net Developable Site Area** – the portion of a parcel or site that is remaining after requirements for minimum setbacks, yards, urban squares, easements and right-of-ways.
- Parcel/Lot line, front, exterior, rear** – the legal boundary of a parcel or lot of land.
- Pedestrian Realm** – the pedestrian realm is the area from the back-of-curb to the face of the adjacent building.
- Main front wall** – the main front exterior wall of a building or structure.
- Setback** – the horizontal distance measured at right angles to the boundary of the parcel, lot or block of land, between the main wall of the building and the main boundary.
- Transit Street** – A transit street is a street along which the transit line currently exists or is planned to be located.